TERMINAL SUPERINTENDENT

F. GOODWIN	Oakland

ASST. TERMINAL SUPERINTENDENTS

A. JENSEN	Oakland
H. LONG (Acting)	Oakland

TRAINMASTERS

J. FERRARA	Oakland Pier
W. HALL	Oakland Pier
R. ROBINSON	Suisun-Fairfield
UNDERHILL (Acting)	Stockton
B. EDDLESTONE	Tracy

ASSISTANT TRAINMASTERS

H. MATLEAN, JR. (Acting)	Port Costa
F. SCHETTER	Livermore

TERMINAL TRAINMASTERS

S. CHAMNEY	Oakland
T. WALL	Oakland
L. HARRISON, JR. (Acting)	Oakland

ROAD FOREMEN OF ENGINES

H. BRAY	West Oakland
R. ALVORD	Tracy

ENGINEMEN INSTRUCTOR

M. SCHULZE	West Oakland

ASSISTANT TRAINMASTER— DIVISION EXAMINER

S. HOOSON	Oakland

CHIEF TRAIN DISPATCHERS

B. WATTS	Oakland Pier
C. W. HANSEN	Stockton

A. S. McCANN
Assistant Superintendent, Oakland Pier

W. E. EASTMAN
Assistant Superintendent, Stockton

C. F. HEATH
Assistant Superintendent, Oakland Pier

SOUTHERN PACIFIC COMPANY

WESTERN DIVISION TIMETABLE

244

EFFECTIVE SUNDAY, OCTOBER 19, 1947
AT 12:01 A. M.
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYES ONLY

J. W. CORBETT,
General Manager.

R. E. HALLAWELL,
H. R. HUGHES,
Assistant General Managers.

C. H. GRANT,
General Superintendent of Transportation.

F. E. KALBAUGH,
Superintendent of Transportation.

E. D. MOODY,
Superintendent.

HOSPITAL DEPARTMENT SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. W. W. Washburn	Chief Surgeon
San Francisco	Dr. Clinton Horn	Medical Examiner, 65 Market St.
Oakland	Dr. Harry H. Appeldorn	Division Surgeon
Oakland	Dr. John Murphy	District Physician and Surgeon
Oakland	Dr. R. F. Dooley	District Physician and Surgeon
Oakland	Dr. Edmund H. Padden	Oculist
Oakland	Dr. Milton Shutes	Oculist and Aurist
East Oakland	Dr. R. James Walker	District Physician and Surgeon
West Oakland	Dr. D. W. Stomberg	District Physician and Surgeon
West Oakland	Dr. C. Jackemy	District Physician and Surgeon
North Oakland	Dr. N. P. Dunne	District Physician and Surgeon
Fruitvale	Dr. J. W. Scamell	District Physician and Surgeon
Fruitvale	Dr. L. E. Lacey	District Physician and Surgeon
Fruitvale	Dr. G. W. Dygert	District Physician and Surgeon
Fruitvale	Dr. O. T. Leftwich	Oculist and Aurist
Fruitvale	Dr. H. P. Howell	Asst. Oculist and Aurist
Elmhurst	Dr. E. L. Armstrong	District Physician and Surgeon
Elmhurst	Dr. C. G. Furbush	Asst. Dist. Physician and Surgeon
Berkeley	Dr. J. R. Masterson	District Physician and Surgeon
Berkeley	Dr. A. M. McIntosh	District Physician and Surgeon
Berkeley	Dr. A. J. Fleisher	District Physician and Surgeon
Albany	Dr. Douglas Ream	District Physician and Surgeon
Richmond	Dr. N. C. Kern	District Physician and Surgeon
Richmond	Dr. W. E. Cunningham	District Physician and Surgeon
Alameda	Dr. A. L. Guerra	District Physician and Surgeon
Alameda	Dr. D. D. Stafford	District Physician and Surgeon
Alameda	Dr. John Ohanneson	Asst. Dist. Physician and Surgeon
San Leandro	Dr. G. T. Honaker	District Physician and Surgeon
San Leandro	Dr. P. C. Rahn	District Physician and Surgeon
Hayward	Dr. Charles C. Impey	District Physician and Surgeon
Rodeo	Dr. J. C. McCullough	District Physician and Surgeon
Crockett	Dr. J. M. McCullough	District Physician and Surgeon
Vallejo	Dr. Burton F. Jones	District Physician and Surgeon
Vallejo	Dr. A. J. Ryan	District Physician and Surgeon
Napa	Dr. D. H. Murray	District Physician and Surgeon
St. Helena	Dr. M. M. Booth	District Physician and Surgeon
Calistoga	Dr. Frank McGreane	District Physician and Surgeon
Santa Rosa	Dr. A. B. Herrick	District Physician and Surgeon
Santa Rosa	Dr. E. T. Noall	District Physician and Surgeon
Santa Rosa	Dr. A. M. Bowles	Asst. Dist. Physician and Surgeon
Benicia	Dr. N. J. Crisp	District Physician and Surgeon
Benicia	Dr. A. C. Atwood	Asst. Dist. Physician and Surgeon
Martinez	Dr. Edwin Merrithew	District Physician and Surgeon
Martinez	Dr. G. L. Coates	Asst. Dist. Physician and Surgeon
Concord	Dr. E. B. Todd	Emergency Surgeon
Walnut Creek	Dr. M. C. Bolender	Emergency Surgeon
Danville	Dr. John Blemer	Emergency Surgeon
Pittsburg	Dr. Claude L. Kerns	Emergency Surgeon
Antioch	Dr. L. B. Weatherbee	District Physician and Surgeon
Byron	Dr. J. W. Hammond	District Physician and Surgeon
Suisun-Fairfield	Dr. Felix R. Rossi, Jr.	District Physician and Surgeon
Vacaville	Dr. M. P. Stansbury	District Physician and Surgeon
Esparto	Dr. W. D. Garcelon	Emergency Surgeon
Dixon	Dr. O. P. Floreth	District Physician and Surgeon
Davis	Dr. T. E. Cooper	Emergency Surgeon
Davis	Dr. Leo A. Cronan	Emergency Surgeon
Sacramento	Dr. W. W. Cress	Division Surgeon
Sacramento	Dr. A. F. Wallace	Division Surgeon
Sacramento	Dr. Manuel L. Azevedo	District Physician and Surgeon
Sacramento	Dr. W. N. Becker	District Physician and Surgeon
Sacramento	Dr. R. P. Jones	District Physician and Surgeon
Sacramento	Dr. J. Roy Jones	Oculist and Aurist
Roseville	Dr. L. E. Jones	District Physician and Surgeon
Roseville	Dr. J. F. McAnnally	Asst. Dist. Physician and Surgeon
Tracy	Dr. J. E. Longley	District Physician and Surgeon
Tracy	Dr. H. K. Wilson	Asst. Dist. Physician and Surgeon
Stockton	Dr. H. T. Quinn	District Physician and Surgeon
Stockton	Dr. E. G. Hermosillo	Asst. Dist. Physician and Surgeon
Stockton	Dr. D. R. Powell	Oculist and Aurist
Lodi	Dr. L. J. Peterson	District Physician and Surgeon
Lodi	Dr. C. V. Thompson	District Physician and Surgeon
Lockeford	Dr. N. P. Barbour	Emergency Surgeon
Galt	Dr. V. E. Greer, Jr.	District Physician and Surgeon
Ione	Dr. Hugo Childress	Emergency Surgeon
Elk Grove	Dr. Paul W. Frame	District Physician and Surgeon
Oakdale	Dr. E. E. Chouret	District Physician and Surgeon
Manteca	Dr. K. W. Hidy	Emergency Surgeon
Manteca	Dr. Curtis M. Galt	Emergency Surgeon
Modesto	Dr. Fred R. DeLappe	District Physician and Surgeon
Modesto	Dr. H. R. Wilson	District Physician and Surgeon
Modesto	Dr. J. A. Porter	Oculist and Aurist
Ceres	Dr. F. K. Lord	Emergency Surgeon
Turlock	Dr. M. C. Collins	District Physician and Surgeon
Livingston	Dr. Charles L. Garvin	District Physician and Surgeon
Merced	Dr. E. R. Fountain	District Physician and Surgeon
Merced	Dr. W. E. Fountain	Asst. Dist. Physician and Surgeon
Chowchilla	Dr. Herbert O. Leff	Emergency Surgeon
Chowchilla	Dr. A. B. Bigler	Emergency Surgeon
Madera	Dr. Herbert Weinberger	District Physician and Surgeon
Fresno	Dr. F. E. Cooley	District Physician and Surgeon
Fresno	Dr. W. E. Furze	Asst. Dist. Physician and Surgeon
Fresno	Dr. O. B. Doyle	Asst. Dist. Physician and Surgeon
Fresno	Dr. L. G. Price	Oculist
Patterson	Dr. E. G. Allen	District Physician and Surgeon
Crows Landing	Dr. E. G. Allen	District Physician and Surgeon
Newman	Dr. A. M. Roscoe	District Physician and Surgeon
Newman	Dr. James E. Thompson	Asst. Dist. Physician and Surgeon
Gustine	Dr. A. W. Gustafson	Emergency Surgeon
Los Banos	Dr. L. R. Hillyer	District Physician and Surgeon
Kerman	Dr. J. C. Drake	District Physician and Surgeon
Pleasanton	Dr. Harold J. Shanks	District Physician and Surgeon
Livermore	Dr. Paul Dolan	District Physician and Surgeon
Centerville	Dr. G. S. Holeman	District Physician and Surgeon
Irvington	Dr. E. M. Grimmer	Emergency Surgeon
San Jose	Dr. D. R. Threlfall	District Physician and Surgeon
San Jose	Dr. R. C. Sheretz	Asst. Dist. Physician and Surgeon
San Jose	Dr. John M. Hohl	Asst. Dist. Physician and Surgeon
San Jose	Dr. Phillip Jordan	Oculist and Aurist

Note.—Emergency Surgeons should only be summoned for temporary treatment when prompt attention is required and when patients cannot be sent to, or await arrival of, Division or District Surgeon.

HOSPITALS

GENERAL HOSPITAL	SAN FRANCISCO
EMERGENCY HOSPITAL	SACRAMENTO
EMERGENCY HOSPITAL	WEST OAKLAND

WATCH INSPECTORS

S. A. Pope, Manager of Time Service	65 Market St., San Francisco
San Francisco	E. J. Land, 745 Third St.
San Francisco	I. S. Preston, 357 Phelan Bldg.
Oakland	E. W. Becker, 3357 E. 14th St.
Oakland	Leroy D. Wentz, 1624 Franklin St.
Oakland	E. S. Griffin, 214 Easton Bldg.
Oakland	Don J. Allphin, 5836 Foothill Blvd.
Oakland	E. D. Stucki, 4844 E. 14th St.
Alameda	A. O. Gott
Berkeley	Service & Post, 2179 Shattuck Ave.
Berkeley	Ernest L. Dorrett, 1823 Solano Ave.
Richmond	O. A. Poulsen, 1317 McDonald Ave.
Stockton	C. Mantele, 129 N. Sutter St.
Lodi	Donnell Guptill, 22 S. School St.
Benicia	Curt S. Appe
Vallejo	G. E. Bangle Co.
Calistoga	A. J. Sorini
Sacramento	H. T. Harger, 1028 K St.
Roseville	W. F. Sugden
Martinez	John G. Beard
Pittsburg	Messrs. H. A. Minasian & H. A. Clark
Tracy	L. H. Jolley
Livermore	C. Harlie Power
Walnut Creek	Kirkeby and Bitnes, 1346 Main St.
San Jose	Kochers, 160 So. First St.
Newman	Ernest Beall
Los Banos	John B. Machado
Fresno	M. M. Haney, 911 Van Ness Ave.
Madera	J. W. Brooks
Merced	Davis-Watry, 511 17th St.
Modesto	W. P. Shoemake
Turlock	D. F. Hall

MARTINEZ SUBDIVISION

EASTWARD

FIRST CLASS

Timetable No. 244

October 19, 1947

Capacity of sidings	102	14	15	244	246	28	56	52	224	Mile Post Location		STATIONS	Distance from Oakland Pier
	Streamliner City of San Francisco	Beaver	West Coast	Statesman	Statesman	San Francisco Overland	Passenger	San Joaquin Daylight	Senator				
	Leave Daily	Leave Daily	Leave Daily	Leave Sunday and Holidays	Leave Daily Ex. Sunday and Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily				
	PM 5.00	PM 4.00		PM 2.00	PM 1.30	AM 11.00	AM 10.00	AM 8.00	AM 7.20		Oakland Ferry	**SAN FRANCISCO**	
	5.20	4.20		2.20	1.50	11.20	10.20	8.20	7.40		Oakland Ferry	3.5 **OAKLAND PIER**	
Oakland yard BKWIP	PM 5.30	PM 4.30		PM 2.25	PM 2.00	AM 11.30	AM 10.30	AM 8.25	AM 7.47	3.5	A.B.S.	TO-R **OAKLAND PIER**	0.0
BKWOITYP										(4.9) 4.5	A.B.S.	(TO-R **WEST OAKLAND**)	(1.4)
IP	s 5.37	s 4.39		s 2.33	s 2.08	s 11.38	s 10.38	s 8.32	s 7.53	5.5	A.B.S.	2.0 **OAKLAND (16th Street)**	2.0
IP										7.0	Automatic Train Control	1.5 TO **SHELLMOUND**	3.5
P	s 5.45	s 4.49		s 2.42	s 2.18	s 11.47	s 10.47	s 8.40	s 8.01	9.2	Automatic Train Control	2.2 **BERKELEY**	5.7
P	5.53	4.57		s 2.52	s 2.29	AM s 11.56	s 10.57	s 8.49	8.09	15.0	Automatic Train Control	5.8 **RICHMOND**	11.5
WP										16.6	Automatic Train Control	1.6 **SAN PABLO**	13.1
E 105 W 95 P	6.02	5.07		f 3.03	s 2.41	PM 12.07	f 11.09	9.00	8.19	23.0	Automatic Train Control	6.4 TO **PINOLE**	19.5
Port Costa yard P	6.10	s 5.19		s 3.13	s 2.54	s 12.17	s 11.26	s 9.12	s 8.29	28.9 29.0	Automatic Train Control	5.9 **CROCKETT**	25.4
BKWOTP	6.13			f 3.17	s 2.59		s 11.32			31.1	Automatic Train Control	2.1 R **PORT COSTA**	27.5
M 116 P	6.16									33.1	Automatic Train Control	2.0 **OZOL**	29.5
WIP	6.19	s 5.33		s 3.26	s 3.10	12.27	s 11.40 AM	s 9.23 AM	s 8.38	34.7 31.7	Automatic Train Control	1.6 TO **MARTINEZ**	31.1
M 118 WP	6.26	5.42		3.34	3.18	12.35			8.46	38.0	Automatic Block System	6.3 **BAHIA**	37.4
E 83 Suisun yard W 87 BKWOYP	6.35	5.53		s 3.52	s 3.44	12.45			s 9.00	48.9	Automatic Block System	10.9 TO-R **SUISUN-FAIRFIELD**	48.3
M 88 WYP	6.42	6.04		f 4.04	s 3.57	12.55			9.11	59.4	Automatic Block System	10.5 **ELMIRA**	58.8
M 74 WP	6.48	6.12		f 4.15	s 4.15	1.03			9.18	67.5	Automatic Block System	8.1 **DIXON**	66.9
E 80 Yard Limits W 81 KWIYP	6.55	s 6.28 PM	PM 6.10	s 4.28	s 4.38	1.13			s 9.30	75.6	Automatic Block System	8.1 TO-R **DAVIS**	75.0
M 96 P	7.00		6.16	4.34	4.44	1.19			9.36	80.4	Automatic Block System	4.8 **WEBSTER**	79.8
Sacramento yard IP										86.9	Automatic Block System	6.5 **SNRy Crossing**	86.3
BKWOTIP	s 7.13 PM		s 6.30 PM	s 4.50 PM	s 5.00 PM	s 1.35 PM			s 9.50 AM	89.0	Automatic Block System	2.1 TO-R **SACRAMENTO**	88.4
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Sunday and Holidays	Arrive Daily Ex. Sunday and Holidays	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily			(88.4)	
	(1.43) 51.49	(1.58) 38.13	(0.20) 40.20	(2.25) 36.51	(3.00) 29.46	(2.05) 42.43	(1.10) 26.66	(0.58) 32.17	(2.03) 43.12			Time over District Average Speed per Hour	

Double Track

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93. Inferior first-class trains must clear the time of Nos. 101 and 102 not less than 5 minutes. Second and third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Second and third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control eastward track from Martinez to westward dwarf signal 300 ft. east of draw span.

When Signal 328 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 550 feet west of semi-automatic signal, opposite white concrete marker block.

No. 224 reduce speed to 30 MPH at Richmond Sunday and Holidays to dispatch U. S. Mail.

No. 56 stop at Pinole, Rodeo, Oleum and Selby daily except Sunday and Holidays to exchange U. S. Mail.

No. 56 stop on flag at Selby.

No. 246 stop on flag at Giant for express.

No. 246 stop at Rodeo, Oleum and Selby.

WESTWARD

FIRST CLASS

Timetable No. 244

October 19, 1947

Mile Post Location		STATIONS		Distance from Sacramento	21 Mail	19 Klamath	23 Gold Coast	57 Owl	101 Streamliner City of San Francisco	247 El Dorado	11 Cascade	13 Beaver	16 West Coast	229 Governor	243 Governor
					Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday and Holidays	Arrive Sunday and Holidays
		SAN FRANCISCO 3.5	Oakland Ferry	92.0	AM 5.50	AM 8.20	AM 8.50	AM 8.50	AM 9.15	AM 9.50	AM 11.20	AM 11.50		PM 5.20	PM 4.50
		OAKLAND PIER		88.5	5.30	8.00	8.30	8.30	8.55	9.30	11.00	11.30		5.00	4.30
3.5	A.B.S.	TO-R OAKLAND PIER 2.0	Double Track	88.5	AM s 5.00	AM s 7.45	AM s 8.05	AM s 8.15	AM s 8.45	AM s 9.23	AM s 10.50	AM s 11.20		PM s 4.45	PM s 4.20
(4.9) 4.5		(TO-R WEST OAKLAND)		(87.5)											
5.5		OAKLAND (16th Street) 1.5		86.5	s 4.50	s 7.37	s 7.58	s 8.07	s 8.38	s 9.16	s 10.42	s 11.10		s 4.35	s 4.12
7.0	Automatic Train Control	TO SHELLMOUND 2.2		85.0											
9.2		BERKELEY 5.8		82.8	s 4.30	s 7.21	s 7.46	s 7.52	s 8.28	s 9.05	s 10.28	s 10.56		s 4.18	s 4.01
15.0		RICHMOND 1.6		77.0	s 4.10	s 7.06	s 7.28	s 7.38	8.17	8.54	10.16	10.44		s 4.03	s 3.50
16.6		SAN PABLO 6.4		75.4											
23.0		TO PINOLE 5.9		69.0	3.51	6.50	7.09	7.21	8.08	8.43	10.05	10.33		s 3.46	3.37
28.9 29.0		CROCKETT 2.1		63.1	s 3.41	s 6.40	s 6.58	s 7.10	8.00		9.56	10.24		s 3.36	s 3.28
31.1		R PORT COSTA 2.0		61.0					7.57	s 8.31				s 3.27	f 3.23
33.1		OZOL 1.6		59.0											
34.7 31.7		TO MARTINEZ 6.4		57.4	3.26	s 6.26	s 6.40	6.53 AM	7.51	s 8.25	9.46	s 10.12		s 3.21	s 3.17
38.0	Automatic Block System	BAHIA 10.9		51.0	3.17	6.12	6.27		7.43	8.15	9.37	10.02		3.08	3.07
48.9		TO-R SUISUN-FAIRFIELD 10.5		40.1	s 3.06	s 6.01	6.16		7.34	s 8.04	9.26	9.51		s 2.57	s 2.56
59.4		ELMIRA 8.1		29.6	2.53	5.49	6.02		7.27	7.53	9.16	9.41		s 2.41	f 2.44
67.5		DIXON 8.1		21.5	2.45	f 5.40	5.53		7.21	7.45	9.09	9.34		s 2.32	f 2.35
75.6		TO-R DAVIS 4.8		13.4	f 2.36	5.30 AM	5.43		7.14	s 7.36	9.00 AM	9.25 AM	AM s 10.50	s 2.20	s 2.26
80.4		WEBSTER 6.5		8.6	2.30		5.36		7.09	7.30			10.41	2.10	2.20
86.9		SNRy Crossing 2.1		2.1											
89.0		TO-R SACRAMENTO		0.0	2.20 AM		5.25 AM		7.00 AM	7.20 AM			10.30 AM	2.00 PM	2.10 PM
		(88.5)			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday and Holidays	Leave Sunday and Holidays
		Time over District Average Speed per Hour			(2.40) 33.15	(2.15) 33.38	(2.40) 33.15	(1.22) 22.75	(1.45) 50.57	(2.03) 43.17	(1.50) 40.96	(1.55) 39.18	(0.20) 40.20	(2.45) 32.18	(2.10) 40.84

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93. Inferior first-class trains must clear the time of Nos. 101 and 102 not less than 5 minutes. Second and third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Second and third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control westward track from 100 ft. east of Signal 357 to Martinez.

When Signal 347 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 1250 feet east of semi-automatic signal, opposite white mark on bridge.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
23	Davis, Dixon, Suisun-Fairfield		Ogden	Daily
11	Richmond		Eugene	Daily
13	Crockett		Portland	Daily
229	Cygnus	Any Station	Suisun	Daily Ex. Sun. & Hol.
229	Selby, Oleum, Rodeo	Any Station	Any Station	Daily Ex. Sun. & Hol.

MARTINEZ SUBDIVISION

EASTWARD

FIRST CLASS

Timetable No. 244

October 19, 1947

Capacity of sidings	26 Passenger Leave Daily	20 Klamath Leave Daily	22 Mail Leave Daily	24 Gold Coast Leave Daily	58 Owl Leave Daily	248 El Dorado Leave Daily	12 Cascade Leave Daily	Mile Post Location	STATIONS		Distance from Oakland Pier
	PM 8.00	PM 8.00	PM 7.30	PM 7.00	PM 6.30	PM 5.30	PM 5.00		**SAN FRANCISCO**	Oakland Ferry	
	8.20	8.20	7.50	7.20	6.50	5.50	5.20		3.5 **OAKLAND PIER**		
Oakland yard BKWIP	PM 8.55	PM 8.45	PM 8.05	PM 7.35	PM 7.00	PM 5.57	PM 5.35	3.5	TO-R **OAKLAND PIER**	A. B. S. Double Track	0.0
BKWOITYP								(4.9) 4.5	(TO-R **WEST OAKLAND**)		(1.4)
IP	s 9.06	s 8.55	s 8.14	s 7.44	s 7.09	s 6.04	s 5.43	5.5	2.0 **OAKLAND (16th Street)**		2.0
IP								7.0	1.5 TO **SHELLMOUND**	Automatic Train Control	3.5
P	s 9.18	s 9.07	s 8.24	s 7.54	s 7.20	s 6.13	s 5.51	9.2	2.2 **BERKELEY**		5.7
P	s 9.32	s 9.21	s 8.36	s 8.06	s 7.32	6.21	6.00	15.0	5.8 **RICHMOND**		11.5
WP								16.6	1.6 **SAN PABLO**		13.1
E 105 W 95 P	9.44	9.32	8.47	8.17	7.43	6.31	6.10	23.0	6.4 TO **PINOLE**		19.5
Port Costa yard P	s 9.58	s 9.47	s 9.00	s 8.30	s 7.58	s 6.40	s 6.21	28.9 29.0	5.9 **CROCKETT**		25.4
BKWOTP	s 10.02							31.1	2.1 R **PORT COSTA**		27.5
M 116 P								33.1	2.0 **OZOL**		29.5
WIP	s 10.15	s 10.02	s 9.14	s 8.45	s 8.10 PM	s 6.50	6.30	34.7 31.7	1.6 TO **MARTINEZ**		31.1
M 118 WP	10.25	10.11	9.23	8.54		6.58	6.38	38.0	6.3 **BAHIA**	Automatic Block System	37.4
E 83 Suisun Yard W 87 BKWOYP	s 10.41	s 10.25	s 9.38	s 9.10		s 7.10	6.49	48.9	10.9 TO-R **SUISUN-FAIRFIELD**		48.3
M 88 WYP	10.55	10.36	9.51	9.24		7.21	6.59	59.4	10.5 **ELMIRA**		58.8
M 74 WP	f 11.07	10.44	10.00	9.33		7.29	7.06	67.5	8.1 **DIXON**		66.9
E 80 Yard Limits W 81 KWIYP	s 11.30	s 11.00 PM	s 10.20	s 9.54		s 7.40	s 7.20 PM	75.6	8.1 TO-R **DAVIS**		75.0
M 96 P	11.38		10.28	10.03		7.46		80.4	4.8 **WEBSTER**		79.8
Sacramento yard IP								86.9	6.5 **SNRy Crossing**		86.3
BKWOTIP	s 11.55 PM		s 10.45 PM	s 10.20 PM		s 8.00 PM		89.0	2.1 TO-R **SACRAMENTO**		88.4
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(88.4)		
	(3.00) 29.46	(2.15) 33.33	(2.40) 33.15	(2.45) 32.18	(1.10) 26.66	(2.03) 43.12	(1.45) 42.85		............Time over District............ ....Average Speed per Hour.......		

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93. Inferior first-class trains must clear the time of Nos. 101 and 102 not less than 5 minutes. Second and third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Second and third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control eastward track from Martinez to westward dwarf signal 300 ft. east of draw span.

When Signal 328 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 550 feet west of semi-automatic signal, opposite white concrete marker block.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
12	Richmond	Eugene	....	Daily
24	Dixon	Sparks	....	Daily
20	Elmira, Dixon	Woodland	....	Daily

No. 26 stop on flag at any station to receive or discharge passengers, baggage, mail or express to or from any station.

Timetable No. 244

October 19, 1947

Mile Post Location		STATIONS	Distance from Sacramento	WESTWARD FIRST CLASS 27 San Francisco Overland	 55 Passenger	 223 Senator	 51 San Joaquin Daylight	 245 Sierra	 241 Sierra
				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Sunday and Holidays	Arrive Daily Ex. Sunday and Holidays
0.0	Oakland Ferry	**SAN FRANCISCO** 3.5	92.0	PM 6.50	PM 7.20	PM 7.50	PM 8.30	PM 10.50	PM 11.10
3.5		**OAKLAND PIER**	88.5	6.30	7.00	7.30	8.10	10.30	10.50
3.5	A.B.S. Double Track	TO-R **OAKLAND PIER** 2.0	88.5	PM s 6.20	PM s 6.45	PM s 7.20	PM s 7.58	PM s 10.25	PM s 10.42
(4.9) 4.5		(TO-R **WEST OAKLAND**)	(87.5)						
5.5		**OAKLAND (16th Street)** 1.5	86.5	s 6.12	s 6.35	s 7.13	s 7.51	s 10.17	s 10.35
7.0		TO **SHELLMOUND** 2.2	85.0						
9.2	Automatic Train Control	**BERKELEY** 5.8	82.8	s 6.01	s 6.20	s 7.03	s 7.39	s 10.05	s 10.20
15.0		**RICHMOND** 1.6	77.0	5.49	s 6.06	6.52	s 7.28	s 9.53	s 10.05
16.6		**SAN PABLO** 6.4	75.4						
23.0		TO **PINOLE** 5.9	69.0	5.37	f 5.51	6.41	7.15	9.40	9.50
28.9 29.0		**CROCKETT** 2.1	63.1	s 5.28	s 5.41		s 7.07	s 9.30	s 9.40
31.1		R **PORT COSTA** 2.0	61.0		s 5.30			s 9.23	s 9.28
33.1		**OZOL** 1.6	59.0						
34.7 31.7		TO **MARTINEZ** 6.4	57.4	5.16	5.23 PM	s 6.23	6.55 PM	s 9.17	s 9.22
38.0	Automatic Block System	**BAHIA** 10.9	51.0	5.07		6.13		9.06	9.09
48.9		TO-R **SUISUN-FAIRFIELD** 10.5	40.1	4.56		s 6.02		s 8.55	s 8.58
59.4		**ELMIRA** 8.1	29.6	4.46		5.50		8.43	f 8.44
67.5		**DIXON** 8.1	21.5	4.39		5.43		s 8.35	s 8.36
75.6		TO-R **DAVIS** 4.8	13.4	4.30		s 5.35		s 8.25	s 8.25
80.4		**WEBSTER** 6.5	8.6	4.25		5.30		8.10	8.10
86.9		**SNRy Crossing** 2.1	2.1						
89.0		TO-R **SACRAMENTO**	0.0	4.15 PM		5.20 PM		8.00 PM	8.00 PM
		(88.5)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Sunday and Holidays	Leave Daily Ex. Sunday and Holidays
		Time over District		(2.05)	(1.22)	(2.00)	(1.03)	(2.25)	(2.42)
		Average Speed per Hour		42.48	22.75	44.25	29.62	36.62	32.70

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93. Inferior first-class trains must clear the time of Nos. 101 and 102 not less than 5 minutes. Second and third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Second and third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control westward track from 100 ft. east of Signal 357 to Martinez.

When Signal 347 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 1250 feet east of semi-automatic signal, opposite white mark on bridge.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
27	Richmond		Ogden	Daily
241	Teal	Any Station	Any Station	Tues. & Sat.

No. 55 stop at Rodeo daily except Sunday and Holidays to receive U. S. Mail.

No. 55 reduce speed to 5 MPH, or stop, at Pinole daily except Sunday and Holidays to receive U. S. Mail.

EASTWARD

Capacity of sidings		THIRD CLASS			SECOND CLASS	Mile Post Location		Timetable No. 244 October 19, 1947		Distance from Oakland Pier
		476 Freight	**410** Freight	**464** Freight	**442** C. C. M.					
		Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Lv. Daily Ex. Fri. Sat. Sun.			**STATIONS**		
								SAN FRANCISCO	Oakland Ferry	
								3.5 **OAKLAND PIER**		
Oakland yard	BKWIP					3.5	A. B. S.	TO-R **OAKLAND PIER**	Double Track	0.0
	BKWOITYP	PM 11.45	PM 10.15	AM 9.00	PM 10.00	(4.9) 4.5		(TO-R **WEST OAKLAND)**		(1.4)
	IP					5.5		2.0 **OAKLAND (16th Street)**		2.0
	IP					7.0	Automatic Train Control	1.5 TO **SHELLMOUND**		3.5
	P					9.2		2.2 **BERKELEY**		5.7
	P					15.0		5.8 **RICHMOND**		11.5
	WP					16.6		1.6 **SAN PABLO**		13.1
E 105 W 95	P					23.0		6.4 TO **PINOLE**		19.5
Port Costa yard	P					28.9 29.0		5.9 **CROCKETT**		25.4
	BKWOTP			4.00 PM		31.1		2.1 R **PORT COSTA**		27.5
M 116	P					33.1		2.0 **OZOL**		29.5
	WIP	AM 1.30	11.45 PM		11.15	34.7 31.7		1.6 TO **MARTINEZ**		31.1
M 118	WP					38.0	Automatic Block System	6.3 **BAHIA**		37.4
E 83 W 87	Suisun yard BKWOYP	2.15			PM 11.55	48.9		10.9 TO-R **SUISUN-FAIRFIELD**		48.3
M 88	WYP					59.4		10.5 **ELMIRA**		58.8
M 74	WP					67.5		8.1 **DIXON**		66.9
E 80 W 81	Yard Limits KWIYP	3.30			AM 12.35	75.6		8.1 TO-R **DAVIS**		75.0
M 96	P					80.4		4.8 **WEBSTER**		79.8
Sacramento yard	IP					86.9		6.5 **SNRy Crossing**		86.3
	BKWOTIP	4.30 AM			1.00 AM	89.0		2.1 TO-R **SACRAMENTO**		88.4
		Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Ar. Daily Ex. Sat. Sun. Mon.			(88.4)		
		(4.45) 18.71	(1.30) 20.66	(7.00) 3.78	(3.00) 29.17			........Time over District........ ....Average Speed per Hour........		

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93: Second and third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Second and third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control eastward track from Martinez to westward dwarf signal 300 ft. east of draw span.

When Signal 328 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 550 feet west of semi-automatic signal, opposite white concrete marker block.

MARTINEZ SUBDIVISION

WESTWARD

Timetable No. 244
October 19, 1947

Mile Post Location			STATIONS	Distance from Sacramento	THIRD CLASS 465 Freight	 475 Freight
					Arrive Daily Ex. Sunday	Arrive Daily
			SAN FRANCISCO 3.5	92.0		
	Oakland Ferry		**OAKLAND PIER**	88.5		
3.5	A.B.S.	TO-R	**OAKLAND PIER** 2.0	88.5		
(4.9) 4.5		(TO-R	**WEST OAKLAND**)	(87.5)	PM 2.00	AM 1.00
5.5			**OAKLAND (16th Street)** 1.5	86.5		
7.0	Automatic Train Control	TO	**SHELLMOUND** 2.2	85.0		
9.2			**BERKELEY** 5.8	82.8		
15.0			**RICHMOND** 1.6	77.0		
16.6			**SAN PABLO** 6.4	75.4		
23.0		TO	**PINOLE** 5.9	69.0		
28.9 29.0			**CROCKETT** 2.1	63.1		
31.1		R	**PORT COSTA** 2.0	61.0	7.00 AM	
33.1			**OZOL** 1.6	59.0		
34.7 31.7		TO	**MARTINEZ** 6.4	57.4		10.35 PM
38.0	Automatic Block System		**BAHIA** 10.9	51.0		
48.9		TO-R	**SUISUN-FAIRFIELD** 10.5	40.1		10.00
59.4			**ELMIRA** 8.1	29.6		
67.5			**DIXON** 8.1	21.5		
75.6		TO-R	**DAVIS** 4.8	13.4		8.45
80.4			**WEBSTER** 6.5	8.6		
86.9			**SNRy Crossing** 2.1	2.1		
89.0		TO-R	**SACRAMENTO**	0.0		8.15 PM
			(88.5)		Leave Daily Ex. Sunday	Leave Daily
			Time over District		(7.00)	(4.45)
			Average Speed per Hour		3.78	18.71

Double Track: Oakland Pier to Sacramento.

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93: Second and third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Second and third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control westward track from 100 ft. east of Signal 357 to Martinez.

When Signal 347 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 1250 feet east of semi-automatic signal, opposite white mark on bridge.

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Emeryville	6.6	P
Paraffine	7.4	..
Stockyards	7.8	P
Bates (Spur)	11.9	8
Stege	13.1	P
Giant (Spur)	18.9	19 P
Sobrante (Spur)	19.8	45 P
Hercules	23.8	P
Rodeo (Spur)	25.5	22 P
Oleum	26.3	95 P
Tormey (Spur)	27.1	45 P
Selby (Spur)	27.5	61 P
Eckley	30.1	P
Nevada Dock	32.2	P
Army Point (on spur)	33.8	P
Benicia (on spur)	32.4	P
Pierce	40.1	..
Cygnus	42.2	P
Teal	43.2	..
Jacksnipe	45.1	..
Tolenas (Spur)	51.9	71 P
Vanden	54.0	..
Cannon	55.4	117
Batavia (Spur)	64.2	14
Tremont	71.8	47 P
Briggston	73.8	..
Chiles (Spur)	77.1	11
Swingle (Spur)	79.1	18
Mikon (Spur)	86.3	15
Washington	88.3	..

EASTWARD

Capacity of sidings	THIRD CLASS			FIRST CLASS						Mile Post Location			Timetable No. 244 October 19, 1947		Distance from Martinez
			410 Freight				58 Owl	56 Passenger	52 San Joaquin Daylight				STATIONS		
			Leave Daily				Leave Daily	Leave Daily	Leave Daily						
Port Costa yard WIP			PM 11.45				PM 8.14	AM 11.46	AM 9.25	34.7	Automatic Train Control	TO	**MARTINEZ**	D.T.	0.0
P			11.50				8.18	11.49	9.28	36.0			1.3 **MOCOCO**		1.3
Yard Limits 64 YP			PM 11.55				8.21	s 11.53		38.1		TO-R	2.1 **AVON**		3.4
N 82 Yard Limits S 116 WYP			AM 12.05				8.25	AM s 11.58	9.33	41.3		TO	3.2 **PORT CHICAGO**		6.6
50 P			12.15				8.29	PM 12.02		44.8			3.5 **McAVOY**		10.1
Yd. Lmts. 86 BWP			12.45				s 8.33	s 12.06	s 9.40	48.9		TO-R	4.1 **PITTSBURG**		14.2
55 YP			12.52				8.43	12.16	9.45	50.8			1.9 **LOS MEDANOS**		16.1
64 P			1.00				8.47	s 12.24		53.5	Automatic Block System	TO	2.7 **ANTIOCH**		18.8
78 P			1.10				8.51	12.29		57.3			3.8 **NEROLY**		22.6
Yard Limits 52 WP			1.20				f 8.57	s 12.40	9.55	61.7		TO	4.4 **BRENTWOOD**		27.0
82 P			1.30				9.04	s 12.52		66.9		TO	5.2 **BYRON**		32.2
46 P			1.42				9.10	12.58		71.6			4.7 **HERDLYN**		36.9
53 P			1.50				9.15	1.03		75.7			4.1 **BETHANY**		41.0
42 P			1.57				9.20	1.07	10.11	79.1			3.4 **JANNEY**		44.4
Tracy yard BKWOTYP			2.10 AM				s 9.27 PM	s 1.15 PM	s 10.16 AM	82.2		TO-R	3.1 **TRACY**		47.5
			Arrive Daily				Arrive Daily	Arrive Daily	Arrive Daily				(47.5)		
			(2.25) 19.65				(1.13) 39.04	(1.29) 32.09	(0.51) 55.85				Time over District Average Speed per Hour		

RULE 5. Schedule time and train-order time at Mococo apply at end of double track.

Schedule time and train-order time for westward trains at Port Chicago apply at west switch north siding, and for eastward trains apply at east switch south siding.

RULES 86 and 93. Third class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

Capacity of sidings	EAST-WARD ↓ Mile Post Location		Timetable No. 244 October 19, 1947 San Ramon Branch STATIONS	WEST-WARD ↑ Distance from Radum
Yard Limits 64 YP	38.1	TO-R	**AVON**	29.7
WP	42.5	TO	4.4 **CONCORD**	25.3
	45.8		3.3 **LAS JUNTAS**	22.0
P	48.2	TO	2.4 **WALNUT CREEK**	19.6
	54.8		6.6 **DANVILLE**	13.0
27	57.7		2.9 **SAN RAMON**	10.1
Yard Limits	63.6		5.9 **DOUGHERTY**	4.2
	66.4		2.8 **ASCO**	1.4
IYP	67.8	TO	1.4 **RADUM**	0.0
			(29.7)	

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
San Ramon Branch		
Galindo..........(Spur)	41.0	2
Hookston...............	45.1	17
Alamo..................	52.6	..

WESTWARD

FIRST CLASS

Mile Post Location	Timetable No. 244 October 19, 1947		STATIONS	Distance from Tracy	57 Owl Arrive Daily	55 Passenger Arrive Daily	51 San Joaquin Daylight Arrive Daily
34.7	Automatic Train Control	TO	MARTINEZ D.T. 1.3	47.5	AM s 6.48	PM s 5.17	PM s 6.52
36.0			MOCOCO D.T. 2.1	46.2			
38.1		TO-R	AVON 3.2	44.1	6.41	s 5.10	
41.3		TO	PORT CHICAGO 3.5	40.9	6.37	s 5.04	6.42
44.8			McAVOY 4.1	37.4	6.33	4.58	
48.9		TO-R	PITTSBURG 1.9	33.3	s 6.28	s 4.42	s 6.35
50.8			LOS MEDANOS 2.7	31.4			
53.5	Automatic Block System	TO	ANTIOCH 3.8	28.7	6.17	s 4.30	6.28
57.3			NEROLY 4.4	24.9		4.23	
61.7		TO	BRENTWOOD 5.2	20.5	6.09	s 4.17	6.20
66.9		TO	BYRON 4.7	15.3	6.04	s 4.06	
71.6			HERDLYN 4.1	10.6	5.59	4.00	
75.7			BETHANY 3.4	6.5	5.55	3.55	6.07
79.1			JANNEY 3.1	3.1	5.52	3.50	
82.2		TO-R	TRACY	0.0	5.48 AM	3.45 PM	6.00 PM
			(47.5)		Leave Daily	Leave Daily	Leave Daily
			Time over District		(1.00)	(1.32)	(0.52)
			Average Speed per Hour		47.50	30.97	54.80

RULE 5. Schedule time and train-order time at Mococo apply at end of double track.

Schedule time and train-order time for westward trains at Port Chicago apply at west switch north siding, and for eastward trains apply at east switch south siding.

RULES 86 and 93. Third class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
57	Brentwood	Berkeley	Fresno	Daily

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Nichols	43.0	61 P
Shell Point	46.8	48 P
Jersey (Spur)	55.0	22
Newlove (Spur)	56.0	24
Arbor (Spur)	59.4	13
Byron Hot Springs	68.9	..

Timetable No. 244
October 19, 1947
Napa Branch

Capacity of sidings	EASTWARD SECOND CLASS 438 Freight Leave Daily	440 Freight Leave Daily Ex. Sunday	436 Freight Leave Daily	Mile Post Location		STATIONS	Distance from Calistoga	WESTWARD THIRD CLASS 437 Freight Arrive Daily	439 Freight Arrive Daily	441 Freight Arrive Daily Ex. Sunday
Suisun yd. 101 BKWOYP	PM 12.01	AM 7.00	AM 12.01	50.5	TO-R	**SUISUN-FAIRFIELD**	47.8	AM 4.00	PM 4.00	PM 5.00
Suisun yd. 26				46.2		4.3 **THOMASSON**	43.5			
39 WP	12.16	7.15	12.16	44.8		1.4 **CORDELIA**	42.1	3.45	3.45	4.45
23 P	12.26	7.25	12.26	41.0		3.8 **CRESTON**	38.3	3.35	3.35	4.35
Yard Limits WYP	12.41 PM	7.40 AM	12.41 AM	37.2	TO-R	3.8 **NAPA JCT.**	34.5	3.20 AM	3.20 PM	4.20 PM
Yard Limits 50 W				45.5	TO	8.3 **NAPA**	26.2			
30				47.8		2.3 **UNION**	23.9			
				54.0	TO	6.2 **YOUNTVILLE**	17.7			
Yard Limits 21 KT				71.7	TO	17.7 **CALISTOGA**	0.0			
	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily			(47.8)		Leave Daily	Leave Daily	Leave Daily Ex. Sunday
	(0.40) 19.95	(0.40) 19.95	(0.40) 19.95			Time over District Average Speed per Hour		(0.40) 19.95	(0.40) 19.95	(0.40) 19.95

Timetable No. 244
October 19, 1947
Schellville Branch

Capacity of sidings	EASTWARD SECOND CLASS 438 Freight Leave Daily	436 Freight Leave Daily	Mile Post Location		STATIONS	Distance from Schellville	WESTWARD THIRD CLASS 437 Freight Arrive Daily	439 Freight Arrive Daily
Yard Limits 35 WYP	PM 1.00	AM 1.00	37.2	TO-R	**NAPA JCT.**	11.3	AM 3.00	PM 3.00
68	1.05	1.05	38.0		0.8 **LOMBARD**	10.5	2.55	2.55
IP			40.7		2.7 **BRAZOS**	7.8		
Yard Limits Y	1.40 PM	1.40 AM	48.5	TO-R	7.8 **SCHELLVILLE**	0.0	2.20 AM	2.20 PM
	Arrive Daily	Arrive Daily			(11.3)		Leave Daily	Leave Daily
	(0.40) 16.95	(0.40) 16.95			Time over District Average Speed per Hour		(0.40) 16.95	(0.40) 16.95

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Napa Branch		
Subeet	47.9	9
Rocktram	42.8	21
Imola (Spur)	44.2	3
Oak Knoll (Spur)	50.2	3
Oakville	57.5	26
Rutherford	59.4	20
Zinfandel	61.2	......
Thomann	62.1	40
St. Helena	63.6	22
Krug	64.5	6
Barro (Spur)	65.3	6
Bale (Spur)	67.5	5W
Larkmead	68.3	12
Maple	69.0	9W
Schellville Branch		
Buchli	42.2	7
Ramal (Spur)	45.7	10
Winters Branch		
Hartley (Spur)	68.5	1
Allendale	70.3	..
Norton	80.3	13
Arroz (Spur)	82.8	3
Citrona (Spur)	83.6	7
Madison (Spur)	86.8	31

Timetable No. 244
October 19, 1947
Vallejo Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Vallejo ↑
Yard Limits 35 WYP	37.2	TO-R	**NAPA JCT.**	7.1
21	34.4		2.8 **FLOSDEN**	4.3
Yard Limits WT	30.1	TO-R	4.3 **VALLEJO**	0.0
			(7.1)	

Timetable No. 244
October 19, 1947
Union Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location	STATIONS	WEST-WARD Distance from Union ↑
	48.8	**WEST NAPA**	2.0
30	50.8 47.8	2.0 **UNION**	0.0
		(2.0)	

Timetable No. 244
October 19, 1947
Winters Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Esparto ↑
WYP	59.4 59.6		**ELMIRA**	30.3
	63.7	TO	4.1 **VACAVILLE**	26.2
Yard Limits 20 WT	76.0	TO	12.3 **WINTERS**	13.9
W	89.9		13.9 **ESPARTO**	0.0
			(30.3)	

LOS BANOS SUBDIVISION

		EASTWARD				Mile Post Location			Timetable No. 244 October 19, 1947	Distance from Fresno	WESTWARD				
		SECOND CLASS			FIRST CLASS						FIRST CLASS		THIRD CLASS		
Capacity of sidings		434 Freight	432 Freight	430 Freight	58 Owl						57 Owl		401 Freight	403 Freight	405 Freight
		Leave Daily	Leave Daily	Leave Daily	Leave Daily				STATIONS		Arrive Daily		Arrive Daily	Arrive Daily	Arrive Daily
Tracy yard	BKWOTYP	PM 4.30	AM 9.15	AM 2.45	PM 9.35	82.2	Automatic Block System	TO-R	**TRACY**	126.2	AM s 5.40		AM 7.30	PM 3.10	PM 11.50
	IP					84.9			2.7 **LYOTH**	123.5	5.32				
52	P	4.44	9.28	2.59	9.46	87.9			3.0 **YARMOUTH**	120.5	5.28		7.06	2.55	11.35
52	P	4.52	9.36	3.07	9.53	92.6			4.7 **VERNALIS**	115.8	5.22		6.57	2.46	11.25
43	P					96.4			3.8 **HALLY**	112.0					
103	WP	5.15	10.00	3.19	10.02	100.4		TO	4.0 **WESTLEY**	108.0	5.13		6.46	2.35	11.13
52	P	5.26	10.11	3.30	f 10.11	107.4		TO	7.0 **PATTERSON**	101.0	f 5.04		6.36	2.13	11.02
50	P	5.35	10.20	3.39	10.18	113.2			5.8 **CROWS LANDING**	95.2	4.56		6.26	2.04	10.53
47	P					117.3			4.1 **TIMBA**	91.1					
55	WP	5.45	10.30	3.49	f 10.26	119.5		TO	2.2 **NEWMAN**	88.9	f 4.48		6.16	1.54	10.43
50	P	5.52	10.37	3.56	f **10.31**	123.5		TO	4.0 **GUSTINE**	84.9	f 4.43		6.08	1.48	**10.31**
67	P	6.01	10.46	4.07	10.38	129.3			5.8 **INGOMAR**	79.1	4.36		5.58	1.39	10.05
53	P	6.11	10.56	**4.29**	10.45	135.6			6.3 **VOLTA**	72.8	**4.29**		5.48	1.29	9.55
Yard Limits 78	BKWOYP	6.30	11.15	4.45	s 10.57	140.4		TO-R	4.8 **LOS BANOS**	68.0	s 4.23		5.40	1.21	9.45
52	P	6.44	11.30	4.58	11.08	148.3			7.9 **AGATHA**	60.1	4.07		5.15	1.07	9.20
101	P	6.52	11.38	**5.06**	s 11.16	153.0		TO	4.7 **DOS PALOS**	55.4	f 4.01		**5.06**	12.59	9.12
40	P	7.03	11.49	5.17	11.25	159.8			6.8 **OXALIS**	48.6	3.53		4.50	12.48	9.02
103	WP	7.13	AM 11.59	5.27	11.32	166.2		TO	6.4 **FIREBAUGH**	42.2	f 3.46		4.35	12.38	8.52
43	P	7.20	PM 12.07	5.34	11.38	170.8			4.6 **CROMIR**	37.6	3.40		4.15	12.20	8.35
89	P	7.26	**12.13**	5.40	11.44	174.5		TO	3.7 **MENDOTA**	33.9	f 3.36		4.09	**12.13** PM	8.30
39	P	7.38	12.26	5.52	11.53	181.9		R	7.4 **INGLE**	26.5	3.27		3.58	11.58 AM	8.19
44	P	7.42	12.30	5.56	PM 11.56	184.5			2.6 **JAMESAN**	23.9			3.54	11.54	8.14
N 111 S 81 Yard Limits	WYP	**8.00** PM	12.45 PM	6.10 AM	AM 12.06	193.0		TO-R	8.5 **KERMAN**	15.4	f 3.15		3.40 AM	11.40 AM	**8.00** PM
					12.11	196.7			3.7 **FLOYD**	11.7					
Fresno yard	BKWOTYP				s 12.40 AM	208.4		TO-R	11.7 **FRESNO**	0.0	2.55 AM				
		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				(126.2)		Leave Daily		Leave Daily	Leave Daily	Leave Daily
		(3.30) 31.66	(3.30) 31.66	(3.25) 32.42	(3.05) 40.93				Time over District Average Speed per Hour		(2.45) 45.89		(3.50) 28.90	(3.30) 31.66	(3.50) 28.90

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Los Banos line		
Ohm	93.5	..
Solyo	94.9	34 P
Vanormer	104.8	..
Stomar	116.0	..
Linora (Spur)	126.9	41 P
Trent	138.3	..
Abatto (Spur)	141.6	9
Brito	149.6	..
Silaxo	161.6	..
Benito	169.0	25
Arbios	172.8	..
Rolinda (Spur)	198.5	5 P
Pratton	202.5	20 P
Crayold (Spur)	205.3	14

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
58	Solyo, Firebaugh, Mendota, Kerman	Fresno	Martinez	Daily
57	Solyo	Tracy	Fresno	Daily

RULE 5. Schedule time and train-order time for Biola line trains at Kerman apply to north siding, and for Pratton line trains to south siding.

LOS BANOS SUBDIVISION

EASTWARD									WESTWARD		
		SECOND CLASS					Timetable No. 244 October 19, 1947		THIRD CLASS		
Capacity of sidings		434 Freight	432 Freight	430 Freight	Mile Post Location			Distance from Fresno Yard	401 Freight	403 Freight	405 Freight
		Leave Daily	Leave Daily	Leave Daily			STATIONS		Arrive Daily	Arrive Daily	Arrive Daily
N 111 S 81	Yard Limits WYP	PM **8.00**	PM 12.45	AM 6.10	193.0	TO-R	**KERMAN**	18.2	AM 3.40	AM 11.40	PM **8.00**
	P	8.15	1.00	6.25	200.5	TO	7.5 **BIOLA**	10.7	3.27	11.27	7.45
Fresno yard	IP	8.32	1.17	6.42	208.6 199.2		8.1 **BIOLA JCT.**	2.6	3.10	11.10	7.28
	KP				200.2	TO-R	1.0 **MUSCATEL**	1.6			
	BKWP	8.40 PM	1.25 PM	6.50 AM	201.8	R	1.6 **FRESNO YARD**	0.0	3.00 AM	11.00 AM	7.20 PM
		Arrive Daily	Arrive Daily	Arrive Daily			(18.2)		Leave Daily	Leave Daily	Leave Daily
		(0.40) 27.30	(0.40) 27.30	(0.40) 27.30			............Time over District............ ....Average Speed per Hour........		(0.40) 27.30	(0.40) 27.30	(0.40) 27.30

RULE 5. Schedule time and train-order time for Biola line trains at Kerman apply to north siding, and for Pratton line trains to south siding.

Trains to and from Los Banos Subdivision via Biola Jct. use No. 1 drill track to enter or leave Fresno yard.

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Biola line		
West Acres......(Spur)	206.0	4

LATHROP SUBDIVISION

Timetable No. 244
October 19, 1947
Lodi Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Kentucky House
Yard Limits BKWOYP	103.3	TO-R	**LODI**	39.3
			1.9	
11	105.2		**ROMA**	37.4
			5.5	
33 P	110.7		**LOCKEFORD**	31.9
			19.5	
Yard Limits 7 P	130.2	TO	**VALLEY SPRING**	12.4
			12.4	
Yard Limits YWP	142.6		**KENTUCKY HOUSE**	↑ 0.0
			(39.3)	

Timetable No. 244
October 19, 1947
Lodi Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Woodbridge
Yd. Lmts. BKWOYP	103.3	TO-R	**LODI**	2.5
			2.5	
	105.8		**WOODBRIDGE**	↑ 0.0
			(2.5)	

Timetable No. 244
October 19, 1947
Ione Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Ione
Yard Limits 175 WYP	111.7	TO-R	**GALT**	27.1
			5.0	
	116.7		**CCTCo Crossing**	22.1
			22.1	
Yard Limits WTP	138.8	TO	**IONE**	↑ 0.0
			(27.1)	

Timetable No. 244
October 19, 1947
Oakdale Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Montpellier
Stockton yard BKWOITYP	90.9	TO-R	**STOCKTON**	48.9
			12.9	
28 YP	103.8		**PETERS**	36.0
			18.6	
Yard Limits 50 WP	122.4	TO-R	**OAKDALE**	17.4
			10.0	
50 P	132.4	TO	**WATERFORD**	7.4
			7.4	
P	139.8		**MONTPELLIER**	↑ 0.0
			(48.9)	

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Lodi Branch		
Victor..............	107.1	17 P
Clements..............	114.7	10 P
Wallace..............	120.8	27 P
Helisma..............	126.4	14
Norval.........(Spur)	129.3	4
Toyon..............	134.7	11 P
Macnider..............	139.0	11 P

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Oakdale Branch		
Orford.........(Spur)	96.0	5
Holden.........(Spur)	100.6	5
Farmington..........	108.2	13 P
Gotri.........(Spur)	111.5	7
Valley Home..........	116.7	15 P
Adela.........(Spur)	120.6	18
Claribel..........	126.3	46
Hickman..........	134.0	42 P
Ione Branch		
Clay..........	122.0	19
Carbondale..........	132.3	38 P
Lignite.........(Spur)	133.0	5
Edwin.........(Spur)	134.8	27
Clarksona......(Spur)	135.2	13
Dagon.........(Spur)	137.7	14

MERCED SUBDIVISION

Timetable No. 244
October 19, 1947
Berenda Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Daulton
70 WTP	176.5		**BERENDA**	11.4
			3.3	
I	179.8	TO	**KISMET TOWER**	8.1
			4.0	
12	183.8		**TALBOT**	4.1
			4.1	
	187.9		**DAULTON**	↑ 0.0
			(11.4)	

Timetable No. 244
October 19, 1947
Chowchilla Branch

Capacity of sidings	EAST-WARD ↓ Mile Post Location		STATIONS	WEST-WARD Distance from Dairyland
WYP	168.2	TO	**CHOWCHILLA**	10.1
			10.1	
	178.3		**DAIRYLAND**	↑ 0.0
			(10.1)	

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Chowchilla Branch		
Ash..........	172.6	7
Tillman..........	175.3	5
Plains.......(Spur)	177.2	5

LATHROP SUBDIVISION

EASTWARD

Capacity of sidings		THIRD CLASS 425 Freight	THIRD CLASS 423 Freight	THIRD CLASS 421 Freight	SECOND CLASS 402 B. M.	FIRST CLASS 53 Sacramento Daylight	FIRST CLASS 56 Passenger	FIRST CLASS 52 San Joaquin Daylight	FIRST CLASS 59 West Coast	Mile Post Location			Timetable No. 244 October 19, 1947 STATIONS		Distance from Tracy
		Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sun., Mon.	Leave Daily	Leave Daily	Leave Daily	Leave Daily						
Tracy yard	BKWOTYP				AM 12.10	PM 5.00	PM 1.35	AM 10.20		70.8	Automatic Block System	TO-R	TRACY	Double Track	0.0
	IP									78.3			7.5 San Joaquin River Drawb'ge		7.5
Yard Limits W79	WYIP	PM 9.10	PM 12.55	AM 5.55	12.30 AM	5.20 5.50	s 1.51 PM	s 10.33 AM	AM 6.38	81.5		R	3.2 LATHROP		10.7
Stockton yard	I									87.7			6.2 TSRy Crossing		16.9
	BKWOITYP	9.35	1.20	6.20		s 6.10			s 6.53 7.10	90.9		TO-R	3.2 STOCKTON		20.1
	IP									92.3			1.4 STOCKTON TOWER No. 4		21.5
	W									93.9			1.6 AKERS	Centralized Traffic Control	23.1
	P									95.0			1.1 End of Double Track		24.2
125	P									96.6			1.6 CASTLE		25.8
125	P									100.2			3.6 ARMSTRONG		29.4
Yard Limits 129	BKWOYP					s 6.28			s 7.31	103.3			3.1 LODI		32.5
125	P									106.2			2.9 ACAMPO		35.4
126	P									109.5			3.3 FOREST LAKE		38.7
Yard Limits 175	WYP					s 6.43			7.42	111.7			2.2 GALT		40.9
125	P									115.5			3.8 NEED		44.7
128	P									119.5			4.0 McCONNELL		48.7
135	P									122.9			3.4 ELK GROVE		52.1
125	P									125.7			2.8 MEADOWS		54.9
137	WP									129.0			3.3 FLORIN		58.2
Sacramento yard	IP									132.0			3.0 POLK		61.2
138	WIP	10.45 PM	2.30 PM	7.30 AM		7.15 PM			8.15 AM	133.2			1.2 BRIGHTON		62.4

Time at Sacramento and Elvas for information only.
See Sacramento Division timetable for train movements between Sacramento and Brighton.

	425	423	421	402	53	56	52	59		
					PM 7.20			AM 8.20		ELVAS
					7.30 PM			8.30 AM		SACRAMENTO
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sun., Mon.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(62.4)
	(1.35) 32.65	(1.35) 32.65	(1.35) 32.65	(0.20) 32.10	(2.15) 27.73	(0.16) 40.12	(0.13) 49.38	(1.37) 31.97		............Time over District............ ....Average Speed per Hour........

No. 59 reduce speed to 15 MPH at Acampo and 35 MPH at Galt to dispatch mail.
No. 56 stop at Banta, when necessary, to exchange mail.
No. 53 stop on flag at French Camp on Saturday to receive mail.

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Banta..........................	73.9	77 P
Winship..........(Spur)	76.8	9
French Camp..............	86.1	77 P
El Pinal........................	92.7	P
Tomspur..........(Spur)	98.1	6
Urgon..............(Spur)	105.1	31 P
Arno............................	117.5	16 P

WESTWARD

Timetable No. 244

October 19, 1947

Mile Post Location			STATIONS	Distance from Brighton	FIRST CLASS 54 Sacramento Daylight Arrive Daily	 55 Passenger Arrive Daily	 51 San Joaquin Daylight Arrive Daily	 60 West Coast Arrive Daily	THIRD CLASS 420 Freight Arrive Daily	 424 Freight Arrive Daily	 426 Freight Arrive Daily
70.8	Automatic Block System	Double Track	TO-R **TRACY** 7.5	62.4	AM s 11.05	PM s 3.15	PM s 5.55				
78.3			**San Joaquin River Drawb'ge** 3.2	54.9							
81.5			R **LATHROP** 6.2	51.7	10.50 10.15	2.55 PM	5.40 PM	PM 9.26	AM 7.40	PM 3.35	PM 11.30
87.7			**TSRy Crossing** 3.2	45.5							
90.9			TO-R **STOCKTON** 1.4	42.3	s 10.00			s 9.12	7.15	3.10	11.05
92.3			**STOCKTON TOWER No. 4** 1.6	40.9							
93.9		Centralized Traffic Control	**AKERS** 1.1	39.3							
95.0			**End of Double Track** 1.6	38.2							
96.6			**CASTLE** 3.6	36.6							
100.2			**ARMSTRONG** 3.1	33.0							
103.3			**LODI** 2.9	29.9	s 9.30			s 8.40			
106.2			**ACAMPO** 3.3	27.0							
109.5			**FOREST LAKE** 2.2	23.7							
111.7			**GALT** 3.8	21.5	s 9.17			8.26			
115.5			**NEED** 4.0	17.7							
119.5			**McCONNELL** 3.4	13.7							
122.9			**ELK GROVE** 2.8	10.3							
125.7			**MEADOWS** 3.3	7.5							
129.0			**FLORIN** 3.0	4.2							
132.0			**POLK** 1.2	1.2							
133.2			**BRIGHTON**	0.0	8.50 AM			8.05 PM	6.05 AM	2.00 PM	9.55 PM

Time at Sacramento and Elvas for information only.
See Sacramento Division timetable for train movements between Sacramento and Brighton.

STATIONS	54	55	51	60	420	424	426
ELVAS	AM 8.45			PM 7.58			
SACRAMENTO	8.35 AM			7.45 PM			
(62.4)	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
Time over District Average Speed per Hour	(2.15) 27.73	(0. 20) 32.10	(0.15) 42.80	(1.21) 38.29	(1.35) 32.65	(1.35) 32.65	(1.35) 32.65

No. 54 stop at Acampo daily to exchange mail.

No. 54 stop at French Camp daily except Sundays and holidays to exchange mail.

No. 60 will not stop at station at Lathrop.

Nos. 60, 420, 424 and 426 will use east leg of Wye at Lathrop to enter Merced Subdivision.

No. 55 stop at Banta, when necessary, to exchange mail.

MERCED SUBDIVISION

EASTWARD

Capacity of sidings		THIRD CLASS			SECOND CLASS	FIRST CLASS			Mile Post Location		Timetable No. 244 October 19, 1947	Distance from Lathrop
		426	424	420	402	60	56	52				
		Freight	Freight	Freight	B. M.	West Coast	Passenger	San Joaquin Daylight				
		Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex.Sun.,Mon.	Leave Daily	Leave Daily	Leave Daily		Automatic Block System	STATIONS	
Yd.Lmts.	WYIP	PM 11.30	PM 3.35	AM 7.40	AM 12.30	PM 9.26	PM 1.54	AM 10.33	92.9	TO-R	LATHROP	0.0
Yd.Lmts.	IP								93.8		0.9 WPRR Crossing	0.9
76	P	11.37	3.42	7.47	12.36	9.31	s 2.03	10.47	96.8	TO	3.0 MANTECA	3.9
112	P	11.42	3.47	7.52	12.40	9.34	2.06	10.50	99.4		2.6 CALLA	6.5
79	P	11.49	3.53	7.59	12.45	9.37	s **2.18**		103.3	TO	3.9 RIPON	10.4
79	P	PM 11.54	3.58	8.04	12.50	9.40	s 2.25	10.56	106.4		3.1 SALIDA	13.5
E 98 W125	Yard Limits BKWOYP	AM 12.04	4.15	8.14	1.20	s 10.00	s 2.50	s 11.09	113.1	TO-R	6.7 MODESTO	20.2
	IP								114.7		1.6 TSRy Crossing	21.8
72	P	12.12	4.25	8.22	1.28	10.07	s 2.57	11.14	117.4		2.7 CERES	24.5
70	P	12.18	4.32	8.28	1.34	10.11	f 3.01	11.18	120.8		3.4 KEYES	27.9
82	Yard Limits P	12.27	**4.54**	8.37	1.42	s 10.21	s 3.12	s 11.26	126.2	TO	5.4 TURLOCK	33.3
91	P	12.36	5.08	8.46	1.50	10.28	f 3.18	11.32	131.9		5.7 DELHI	39.0
80	WP	12.55	5.17	9.05	1.56	10.33	s 3.29	**11.37**	136.4	TO	4.5 LIVINGSTON	43.5
72	P	1.05	5.26	9.15	2.05	10.39	f 3.37		143.2	TO	6.8 ATWATER	50.3
125	P	1.13	5.33	9.23	2.11	10.43	3.40	11.46	147.4		4.2 FERGUS	54.5
147	Yard Limits BKWOTP	1.19	5.39	9.30	2.35	s 11.00	s 4.01	AM s **11.55**	150.5	TO-R	3.1 MERCED	57.6
71	P	1.28	5.50	9.39	2.45	11.08	f **4.21**	PM 12.02	156.6		6.1 LINGARD	63.7
76	P	1.35	5.58	9.46	2.50	11.12	f 4.29		160.5		3.9 ATHLONE	67.6
78	P	1.45	6.06	9.56	2.57	11.19	f 4.37	12.11	166.9		6.4 MINTURN	74.0
	WYP						s 4.43		168.2	TO	1.3 CHOWCHILLA	75.3
76	P	1.56	6.15	**10.11**	3.06	11.25	f 4.49	12.16	173.0		4.8 FAIRMEAD	80.1
70	WTP	2.03	**6.24**	10.21	**3.15**	11.29	f 4.53	12.20	176.5		3.5 BERENDA	83.6
98	P	2.09	6.30	10.27	3.25	11.32	4.56	12.23	179.2		2.7 NOTARB	86.3
139	Yard Limits P	2.18	6.37	10.35	3.33	s 11.45	s 5.15	s 12.30	183.9	TO	4.7 MADERA	91.0
77	P	2.28	6.46	**10.51**	3.43	PM 11.54	5.23	12.37	190.2		6.3 IRRIGOSA	97.3
78	P	**2.40**	6.53	11.02	3.50	AM 12.03	f 5.30	12.43	195.6		5.4 HERNDON	102.7
Fresno yard	IP	2.50	6.59	11.08	3.56	12.07	5.34	12.46	199.2		3.6 BIOLA JCT.	106.3
Fresno yard	KP								200.2	TO-R	1.0 MUSCATEL	107.3
Fresno yard	BKWP	3.00 AM	7.05 PM	11.15 AM	4.00 AM	12.11	5.38	12.50	201.8	R	1.6 FRESNO YARD D.T.	108.9
Fresno yard	BKWOTYP					s 12.23 AM	s 5.50 PM	s 1.00 PM	205.5	TO-R	3.7 FRESNO	112.6
		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex.Sun.,Mon.	Arrive Daily	Arrive Daily	Arrive Daily			(112.6)	
		(3.30) 31.10	(3.30) 31.10	(3.25) 31.87	(3.30) 31.10	(2.57) 38.70	(3.56) 28.62	(2.27) 45.95			............Time over District............ ....Average Speed per Hour........	

RULES 86 and 93. Second and third class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Fresno Line		
Coronet......(Spur)	100.6	28
Covell............	108.1	16
Alcant............	129.3	..
Arena........(Spur)	138.9	16
Buhach.......(Spur)	144.8	25
Creegan......(Spur)	151.9	21
Labranza.....(Spur)	163.3	4

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Fresno Line		
Sierra Vista...(Spur)	165.8	24
Borden............	186.7	25

No. 56 make an additional stop on flag at mail crane 1650 feet east of station building Keyes, to exchange mail.

No. 56 reduce speed to 10 MPH at Delhi and Atwater to dispatch papers.

No. 60 reduce speed to 5 MPH at Chowchilla daily except Sunday and holidays to receive mail.

MERCED SUBDIVISION

WESTWARD

Timetable No. 244
October 19, 1947

Mile Post Location			STATIONS	Distance from Fresno	FIRST CLASS			THIRD CLASS		
					59 West Coast	55 Passenger	51 San Joaquin Daylight	421 Freight	423 Freight	425 Freight
					Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
92.9	Automatic Block System	TO-R	**LATHROP** 0.9	112.6	AM 6.38	PM s 2.50	PM 5.36	AM 5.55	PM 12.55	PM 9.10
93.8			**WPRR Crossing** 3.0	111.7						
96.8		TO	**MANTECA** 2.6	108.7	6.32	s 2.39	5.31	5.48	12.49	8.59
99.4			**CALLA** 3.9	106.1	6.29	2.36	5.28	5.43	12.44	8.53
103.3		TO	**RIPON** 3.1	102.2	6.25	s **2.18**	5.25	5.36	12.38	8.46
106.4			**SALIDA** 6.7	99.1	6.21	s 1.55	5.21	5.31	12.33	8.41
113.1		TO-R	**MODESTO** 1.6	92.4	s 6.14	s 1.45	s 5.15	5.21	12.23	8.31
114.7			**TSRy Crossing** 2.7	90.8						
117.4			**CERES** 3.4	88.1	5.56	s 1.09	5.06	5.12	12.14	8.22
120.8			**KEYES** 5.4	84.7	5.52	f 1.00	5.02	5.06	12.08 PM	8.15
126.2		TO	**TURLOCK** 5.7	79.3	s 5.41	s 12.47	s **4.54**	4.58	11.59 AM	8.05
131.9			**DELHI** 4.5	73.6	5.35	f 12.41	4.48	4.49	11.50	7.55
136.4		TO	**LIVINGSTON** 6.8	69.1	5.30	s 12.31	4.44	4.40	**11.37**	7.45
143.2		TO	**ATWATER** 4.2	62.3	5.24	s 12.25	4.38	4.15	11.04	7.22
147.4			**FERGUS** 3.1	58.1	5.19	PM 12.15	4.34	4.07	10.56	7.16
150.5		TO-R	**MERCED** 6.1	55.0	s 5.15	s **11.55** AM	s 4.30	4.02	10.50	7.10
156.6			**LINGARD** 3.9	48.9	5.00	11.38	**4.21**	3.52	10.40	7.01
160.5			**ATHLONE** 6.4	45.0	4.56	11.34	4.17	3.44	10.32	6.53
166.9			**MINTURN** 1.3	38.6	4.50	11.28	4.11	3.34	10.22	6.43
168.2		TO	**CHOWCHILLA** 4.8	37.3		s 11.26				
173.0			**FAIRMEAD** 3.5	32.5	4.44	f 11.16	4.05	3.23	**10.11**	6.31
176.5			**BERENDA** 2.7	29.0	4.40	11.11	4.01	**3.15**	10.04	**6.24**
179.2			**NOTARB** 4.7	26.3	4.37	11.08	3.58	3.08	9.58	6.17
183.9		TO	**MADERA** 6.3	21.6	s 4.32	s 11.03	s 3.53	3.02	9.49	6.12
190.2			**IRRIGOSA** 5.4	15.3	4.21	**10.51**	3.46	2.50	9.39	6.03
195.6			**HERNDON** 3.6	9.9	4.16	f 10.46	3.41	**2.40**	9.30	5.55
199.2			**BIOLA JCT.** 1.0	6.3						
200.2		TO-R	**MUSCATEL** 1.6	5.3	4.10	10.40	3.37	2.33	9.23	5.48
201.8	D.T.	R	**FRESNO YARD** 3.7	3.7	4.08	10.38	3.35	2.30 AM	9.20 AM	5.45 PM
205.5		TO-R	**FRESNO**	0.0	4.00 AM	10.30 AM	3.28 PM			
			(112.6)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			Time over District Average Speed per Hour		(2.38) 42.70	(4.20) 22.52	(2.08) 52.78	(3.25) 31.87	(3.35) 30.34	(3.25) 31.87

RULES 86 and 93. Second and third-class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

No. 59 will not stop at station at Lathrop.

Nos. 59, 421, 423 and 425 will use east leg of wye at Lathrop.

No. 55 make an additional stop on flag at mail crane 1650 feet east of station building Keyes, to exchange mail.

NILES SUBDIVISION

EASTWARD

Timetable No. 244
October 19, 1947

Capacity of sidings	SECOND CLASS 402 B. M. Leave Daily Ex. Sat., Sun.	 444 C. C. M. Lv. Daily Ex. Fri. Sat. Sun.	 406 Freight Leave Daily	 472 Freight Leave Daily	Mile Post Location			STATIONS		Distance from Redwood Jct.
Yd. Lmts WIYP	PM 8.40	PM 8.00		AM 1.20	26.2	Automatic Block System	TO-R	REDWOOD JCT.	D. T.	0.0
Yd. Lmts					27.5			1.3 End of Double Track	D. T.	1.3
64 P	8.47			1.27	29.5			2.0 HENDERSON		3.3
51 P	8.54			1.34	33.9			4.4 DUMBARTON		7.7
Yard Limits 100 WIYP	9.20	8.20	AM 6.05	1.55	37.2		TO-R	3.3 NEWARK		11.0
51 P	9.25		6.10	2.00	40.1			2.9 CENTERVILLE		13.9
Yard Limits 80 P	9.28	8.26	6.25	2.03	41.7			1.6 SHINN		15.5
Yard Limits IYP	9.30	8.28 PM	6.30	2.05	42.4		TO-R	0.7 NILES TOWER		16.2
Yard Limits	9.32		6.33	2.07	43.0 29.6			0.6 NILES JCT.		16.8
76 P	9.37		6.38	2.12	31.7			2.1 FARWELL		18.9
91 P	9.47		6.49	2.22	35.6			3.9 SUNOL		22.8
73 P	9.58		7.00	2.33	40.9		TO	5.3 PLEASANTON		28.1
Yd. Lmts. IYP					42.0		TO	1.1 RADUM		29.2
Yd. Lmts. 1-110, 2-105 YP	10.02		7.04	2.37	43.0			1.0 ELIOT		30.2
Yard Limits 1-79, 2-80 BKWP	10.11		7.12	2.46	46.9		TO-R	3.9 LIVERMORE		34.1
72 P	10.18		7.19	2.53	50.5			3.6 ULMAR		37.7
Yard Limits 88 WTP	10.30		7.29	3.05	55.0		TO	4.5 ALTAMONT		42.2
72 P	10.42		7.40	3.17	59.5			4.5 CAYLEY		46.7
69 P	10.55		7.52	3.30	63.1			3.6 MIDWAY		50.3
Tracy yard BKWOTYP	11.10 PM		8.10 AM	3.45 AM	70.8		TO-R	7.7 TRACY		58.0
	Arrive Daily Ex. Sat., Sun.	Ar. Daily Ex. Fri. Sat. Sun.	Arrive Daily	Arrive Daily				(58.0)		
	(2.30) 23.20	(0.28) 34.71	(2.05) 22.56	(2.25) 24.00				........Time over District........ ....Average Speed per Hour........		

RULE 5. Schedule time and train-order time at Redwood Jct. apply at end of double track.

Schedule time and train-order time for eastward trains holding main track at Eliot apply at crossover known as California link.

WESTWARD

THIRD CLASS

Timetable No. 244

October 19, 1947

Mile Post Location		STATIONS		Distance from Tracy	401 Freight Arrive Daily	429 Freight Arrive Daily	409 Freight Arrive Daily	433 Freight Arrive Daily	413 Freight Arrive Daily	435 Freight Arrive Daily
26.2	Automatic Block System	TO-R **REDWOOD JCT.** 1.3	D. T.	58.0	AM 3.10		AM 10.55		PM 6.40	
27.5		**End of Double Track** 2.0		56.7						
29.5		**HENDERSON** 4.4		54.7	3.04		10.49		6.34	
33.9		**DUMBARTON** 3.3		50.3	2.56		10.41		6.26	
37.2		TO-R **NEWARK** 2.9		47.0	2.49		10.34		6.19	
40.1		**CENTERVILLE** 1.6		44.1	2.43		10.28		6.13	
41.7		**SHINN** 0.7		42.5	2.40		10.25		6.10	
42.4		TO-R **NILES TOWER** 0.6		41.8	2.38	AM 3.08	10.23	AM 10.53	6.08	PM 6.38
43.0 29.6		**NILES JCT.** 2.1		41.2	2.37	3.07	10.22	10.52	6.07	6.37
31.7		**FARWELL** 3.9		39.1	2.33	3.03	10.18	10.48	6.03	6.33
35.6		**UNOL** 5.3		35.2	**2.22**	2.53	10.08	10.38	5.53	6.23
40.9		TO **PLEASANTON** 1.1		29.9	2.12	2.42	9.57	10.27	5.42	6.12
42.0		TO **RADUM** 1.0		28.8						
43.0		**ELIOT** 3.9		27.8	2.08	**2.37**	9.53	10.23	5.38	6.08
46.9		TO-R **LIVERMORE** 3.6		23.9	2.00	2.30	9.45	10.15	5.30	6.00
50.5		**ULMAR** 4.5		20.3	1.53	2.23	9.38	10.08	5.23	5.53
55.0		TO **ALTAMONT** 4.5		15.8	1.42	2.12	9.27	9.57	5.12	5.42
59.5		**CAYLEY** 3.6		11.3	1.32	2.02	9.17	9.47	5.02	5.32
63.1		**MIDWAY** 7.7		7.7	1.20	1.50	9.05	9.35	4.50	5.20
70.8		TO-R **TRACY**		0.0	1.00 AM	1.30 AM	8.45 AM	9.15 AM	4.30 PM	5.00 PM
		(58.0)			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
		............Time over District............ ....Average Speed per Hour........			(2.10) 26.76	(1.38) 25.69	(2.10) 26.76	(1.38) 25.69	(2.10) 26.76	(1.38) 25.69

EASTWARD

THIRD CLASS

Timetable No. 244

October 19, 1947

WESTWARD

SECOND CLASS

Capacity of sidings		435 Freight Leave Daily	433 Freight Leave Daily	429 Freight Leave Daily	Mile Post Location		STATIONS	Distance from San Jose Yard	444 C. C. M. Ar. Daily Ex. Fri. Sat. Sun.
Yd. Lmts. 70	KWYP				29.2	A.B.S.	TO-R **NILES** 0.6	18.5	PM 8.30
	IYP	PM 6.38	AM 10.53	AM 3.08	29.8		TO-R **NILES TOWER** 3.0	17.9	8.28 PM
33	P	6.48	11.03	3.18	32.8		**IRVINGTON** 7.9	14.9	
37	P	7.08	11.23	3.38	40.7		**MILPITAS** 2.6	7.0	
	P				43.3		**WAYNE** 4.4	4.4	
San Jose yard	BKWOITYP	7.30 PM	11.45 AM	4.00 AM	47.7		R **SAN JOSE YARD**	0.0	
		Arrive Daily	Arrive Daily	Arrive Daily			(18.5)		Lv. Daily Ex. Fri. Sat. Sun.
		(0.52) 21.60	(0.52) 21.60	(0.52) 21.60			............Time over District............ ....Average Speed per Hour........		(0.02) 15.00

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Tracy line		
Ravenswood....(Spur)	30.9	130P
Dresser......(Spur)	30.9	15
Remillard........	42.4	..
Trevarno........(Spur)	48.4	16P

RULE 5. Schedule time and train-order time at Redwood Jct. apply at end of double track.

Schedule time and train-order time for eastward trains holding main track at Eliot apply at crossover known as California link.

EASTWARD

Capacity of sidings		THIRD CLASS		FIRST CLASS					Mile Post Location		Timetable No. 244 October 19, 1947		Distance from Oakland Pier
		422 Freight	418 Freight	74 Oakland Lark	336 Oakland C. M. E.	40 W. P. Passenger	2 W. P. Passenger	250 Passenger			STATIONS		
		Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Lv. Daily Ex. Fri.Sat.Sun.	Leave Daily	Leave Daily	Leave Daily					
				PM 8.00		PM 6.00	AM 10.00	AM 7.00			SAN FRANCISCO	Oakland Ferry	
				8.20		6.20	10.20	7.20			3.5 OAKLAND PIER		
Oakland yard	BKWIP			PM 8.28		PM 6.30	AM 10.35	AM 7.25	3.5	Automatic Block System	TO-R **OAKLAND PIER**	Double Track	0.0
	BKWOITYP	PM 8.45	AM 9.00		PM 7.30				4.9		1.4 TO-R **WEST OAKLAND**		1.4
	IP					6.38 PM	10.43 AM		5.9		1.0 **MAGNOLIA TOWER**		2.4
	P			s 8.42				s 7.39	6.7		0.8 **OAKLAND (First Street)**		3.2
	YIP			s 8.50				s 7.47	9.7		3.0 **FRUITVALE**		6.2
	WP	9.30	9.25	8.58	7.50			7.55	13.4		3.7 TO-R **ELMHURST**		9.9
70	WP	9.44	10.00	9.06	8.01			**8.04**	20.2		6.8 **RUSSELL**		16.7
64	P	9.55	11.00	9.12	8.10			8.10	25.3		5.1 TO **ALVARADO**		21.8
Yard Limits 80 (Psgr. 24)	WIYP	10.10	11.20 AM	9.19	8.25			s **8.20**	30.6		5.3 TO-R **NEWARK**		27.1
80	P	10.20		9.24	8.32			8.25	34.1		3.5 **ALBRAE**		30.6
	P			9.30				8.31	39.1		5.0 **ALVISO**		35.6
53	P	10.38		f 9.35	8.45			8.35	41.7		2.6 TO **AGNEW**		38.2
San Jose yard	KIP	10.45 PM		9.40 PM	8.50 PM			8.40 AM	44.8		3.1 TO-R **SANTA CLARA**		41.3

Time at San Jose for information only.
See Coast Division timetable for train movements between Santa Clara and San Jose.

		422	418	74	336	40	2	250			
				9.50 PM				8.45 AM			**SAN JOSE**
		Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Ar. Daily Ex. Fri.Sat.Sun.	Arrive Daily	Arrive Daily	Arrive Daily			(41.3)
		(2.00) 19.95	(2.20) 10.01	(1.12) 34.41	(1.20) 29.92	(0.08) 18.00	(0.08) 18.00	(1.15) 33.04			Time over District Average Speed per Hour

RULE 5. Schedule time and train-order time on Elmhurst-Santa Clara line at Newark apply at siding east of station building.

Sections of WPRR first-class trains may display signals between Oakland Pier and Magnolia Tower (WPRR Chestnut Jct.), in either direction without train-order authority.

Registration of sections of WPRR first-class trains terminating at WPRR Chestnut Jct. and moving to WPRR Oakland Yard, may be phoned from WPRR Oakland Yard to Operator SP, Oakland Pier, for entry on register at Oakland Pier.

No. 74 stop on flag at Drawbridge Friday and Saturday.

ADDITIONAL STATIONS

NAME	Mile Post	Capacity
Santa Clara line		
East Oakland	8.3	P
Mulford	15.5	70 P
Robert	17.8	20 P
Mt. Eden	21.5	21 P
Baumberg (Spur)	23.0	10
Hall (Spur)	26.2	9 P
Drawbridge	36.5	P
Niles line		
Estudillo	16.5	35 P
Halvern	24.0	..

EASTWARD — WESTWARD

Capacity of sidings		Mile Post Location		Timetable No. 244 October 19, 1947	Distance from Niles Jct.	SECOND CLASS 444 C. C. M.
				STATIONS		Ar. Daily Ex. Fri.Sat.Sun.
Oakland yard	WP	13.4	Automatic Block System	TO-R **ELMHURST**	16.2	PM 9.08
	P	14.8		1.4 TO **SAN LEANDRO**	14.8	
35	P	17.5		2.7 **LORENZO**	12.1	
Yard Limits 100	P	20.1		2.6 TO **HAYWARD**	9.5	8.52
32	P	26.5		6.4 **DECOTO**	3.1	
Yard Limits 70	KWYP	29.2		2.7 TO-R **NILES**	0.4	8.30 PM
		29.6 43.0		0.4 **NILES JCT.**	0.0	
				(16.2)		Lv. Daily Ex. Fri.Sat.Sun.
				Time over District Average Speed per Hour		(0.38) 24.94

RULE 5. Schedule time and train-order time for westward trains via Decoto at Niles apply at junction switch located 550 feet west of station building.

WESTWARD

Timetable No. 244

October 19, 1947

Mile Post Location		STATIONS	Distance from Santa Clara	FIRST CLASS 39 W. P. Passenger Arrive Daily	335 Oakland C. M. W. Ar. Daily Ex. Sat. Sun. Mon.	73 Oakland Lark Arrive Daily	1 W. P. Passenger Arrive Daily	255 Passenger Arrive Daily	SECOND CLASS 444 C. C. M. Ar. Daily Ex. Fri. Sat. Sun.		THIRD CLASS 419 Freight Arrive Daily	407 Freight Arrive Daily	417 Freight Arrive Daily Ex. Sunday	
0.0	Oakland Ferry	SAN FRANCISCO 3.5	44.8	AM 8.50		AM 9.50	PM 5.50	PM 6.50						
3.5		OAKLAND PIER	41.3	8.30		9.30	5.30	6.30						
3.5	Automatic Block System; Double Track	TO-R OAKLAND PIER 1.4	41.3	AM s 8.05		AM s 9.20	PM s 5.15	PM s 6.25						
4.9		TO-R WEST OAKLAND 1.0	39.9		AM 8.40				PM 9.30		AM 6.30		PM 5.50	
5.9		MAGNOLIA TOWER 0.8	38.9	7.55 AM			5.03 PM							
6.7		OAKLAND (First Street) 3.0	38.1			s 9.05		s 6.10						
9.7		FRUITVALE 3.7	35.1			s 8.52		s 5.59						
13.4		TO-R ELMHURST 6.8	31.4		8.20	8.42		5.50	9.08 PM		6.00		5.25	
20.2		RUSSELL 5.1	24.6		**8.04**	8.34		5.41			5.45		4.50	
25.3		TO ALVARADO 5.3	19.5		7.49	8.28		5.35			5.35		4.30	
30.6		TO-R NEWARK 3.5	14.2		7.40	**8.20**		5.28			5.20	AM 6.05	3.30 PM	
34.1		ALBRAE 5.0	10.7		7.33	8.06		5.22			5.00	5.58		
39.1		ALVISO 2.6	5.7			f 8.01								
41.7		TO AGNEW 3.1	3.1		7.20	f 7.57		5.14			4.40	5.47		
44.8		TO-R SANTA CLARA	0.0		7.15 AM	7.52 AM		5.10 PM			4.30 AM	5.40 AM		

Time at San Jose for information only.

See Coast Division timetable for train movements between Santa Clara and San Jose.

	STATIONS		39	335	73	1	255	444		419	407	417	
	SAN JOSE			7.10 AM	7.47 AM		5.05 PM						
	(41.3)		Leave Daily	Lv. Daily Ex. Sat. Sun. Mon.	Leave Daily	Leave Daily	Leave Daily	Lv. Daily Ex. Fri. Sat. Sun.		Leave Daily	Leave Daily	Leave Daily Ex. Sunday	
	……………Time over District ………Average Speed per Hour………		(0.10) 14.40	(1.25) 28.17	(1.28) 28.14	(0.12) 12.00	(1.15) 33.04	(0.22) 23.18		(2.00) 19.95	(0.25) 34.08	(2.20) 10.01	

RULE 5. Schedule time and train-order time on Elmhurst-Santa Clara line at Newark apply at siding east of station building.

Sections of WPRR first-class trains may display signals between Oakland Pier and Magnolia Tower (WPRR Chestnut Jct.), in either direction without train-order authority.

Registration of sections of WPRR first-class trains terminating at WPRR Chestnut Jct. and moving to WPRR Oakland Yard, may be phoned from WPRR Oakland Yard to Operator SP, Oakland Pier, for entry on register at Oakland Pier.

No. 73 stop on flag at Drawbridge Wednesday and Saturday.

Capacity of sidings		↓ EASTWARD Mile Post Location	Timetable No. 244 October 19, 1947 Stonehurst Branch STATIONS	WESTWARD ↑ Distance from Stonehurst
Oakland yard	WP	13.4	ELMHURST 0.9	0.9
		14.3	STONEHURST	0.0
			(0.9)	

RULE A. All, or portions of, the following rules have been changed. Pasters have been printed covering these changes, and employes must have the pasters in their copy of Book of Rules:

Rules 10(H)
15
26
99
104(D)
210
221
271
295
297
705
707
708
763
837

Definition of FIXED SIGNAL is changed to read as follows:

"A signal of fixed location indicating a condition affecting the movement of a train, such as train-order, automatic, interlocking or absolute signal; switch, stop boards, yard limit boards or speed boards."

RULE 2 (A). Watches subject to inspection must be presented monthly between first and fifteenth, instead of semi-monthly, to a designated inspector.

RULE 4. Designated holidays:

New Year's Day, January 1st
Washington's Birthday, February 22nd.
Decoration Day, May 30th,
Independence Day, July 4th.
Labor Day, first Monday in September.
Thanksgiving Day, fourth Thursday in November.
Christmas Day, December 25th.

RULE 10 (J) is revised to read as follows:

"Speed boards will be located to the right of track in direction of approach where practicable, except on double track where trains keep to the left, they will be located to the left if proximity of adjoining main track prevents location to the right.

Speed boards that prescribe reduction in speed will be located three-fourths mile from initial point of restriction. Speed boards that authorize an increase in speed will be located at the point where higher speed is permissible, and speed may be increased accordingly as soon as rear of train has passed the speed board.

(no change in Figs. 1, 2 and 3)

The higher number on speed board indicates the maximum speed of trains consisting entirely of passenger equipment, and the lower number indicates the maximum speed of all other trains. Where but one number is shown it indicates the maximum speed of all trains.

Round yellow speed boards indicate by black figures the maximum speed of certain passenger trains designated by special instructions in the timetable or by timetable bulletin; speed indicated by oval white speed boards applies to those trains unless a round yellow speed board is displayed on same post below the oval speed board.

Certain speed boards have the word "SIGNAL" above the figures. Such speed boards in approach to a distant signal indicate the speed that must not be exceeded while engine is passing the distant signal three-fourths mile beyond the speed board, unless distant signal can plainly be seen to be displaying proceed indication; and such speed boards in approach to a home signal indicate the speed that must not be exceeded while approaching the home signal three-fourths mile beyond the speed board, until indication of home signal can plainly be seen. The word "SIGNAL" on an oval speed board also applies to a round yellow speed board if displayed on the same post."

RULE 17. Oscillating white light on engines so equipped is to be operated in addition to headlight, when engine is moving at night, and in foggy or stormy weather by day. It must be extinguished approaching passenger stations.

Oscillating red light on engines so equipped shall be operated by day or night, only when a train has stopped, or is stopping, under circumstances that may cause an adjacent track to be fouled, and will not in any way relieve trainmen and enginemen from compliance with Rules 99 and 102. A train or engine on adjacent track must stop at once, and may proceed only after ascertaining that track is safe for passage of trains.

RULES 17, 17 (B), 17 (C), and S-17. Headlight will be displayed by day on Nos. 101, 102, 51, 52, 53 and 54 as an aid to motorists. When so displayed, the provisions of Rules 17, 17 (B), 17 (C) and S-17 will not apply unless other conditions require.

RULE 28. In double track territory signals will be placed to right of track according to direction of movement of train to be flagged. Trains in opposite direction will not be required to observe signals so placed.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction.

RULE 98. Cars must not be kicked or shoved over railroad crossings not protected by interlocking, unless movement is properly protected.

RULE 99 (C). Will apply on Berenda, Chowchilla, Ione, Lodi, Oakdale and Winters Branches; on Napa Branch between Napa and Calistoga, and on San Ramon Branch between Avon and Dougherty.

RULE 102. Yard engines must have two red flags and two red lamps for use in complying with this rule. If taken from engine they must be replaced after use.

RULE 103 (A). No train, engine, motor or car shall be operated over any crossing where special signs appear, reading:

STOP—FLAG HIGHWAY TRAFFIC, or
CAUTION—FLAG HIGHWAY TRAFFIC

unless same be first brought to a stop or caution observed (as indicated by sign) and traffic on crossing protected by member of train crew or other competent employe acting as flagman.

RULE 105. Sidings designated "E" in Capacity of sidings column are assigned for use by eastward trains; those designated "W" are assigned for use by westward trains. Those designated "M" for middle, may be used by trains in either direction. Those designated "N," "S," "1," "2" or "3" are assigned for use by trains as shown in special instructions for the subdivision on which located.

RULE 107. Freight trains and engines must avoid passing between stations and loading tracks when passenger trains are closely approaching from opposite direction on double track, and care must be exercised by non-stopping passenger trains when approaching stations at about the same time that other passenger trains are approaching from the opposite direction. When practicable non-stopping trains are to be given preference, but each train must be operated in a manner to avoid confusion and hazard of personal injury.

RULE 505. AUTOMATIC BLOCK SYSTEM

ELECTRIC SWITCH LOCKS

Where electric switch locks are installed, lock box door must not be opened if movement is to be made into a track leading from main track until engine or car is standing within 150 feet of the switch; or if movement is to be made from such track, or through a crossover to a main track, until switch indicator indicates block clear on opposite track. Within C.T.C. limits dispatcher's permission must also be obtained before lock box door is opened.

After lock box door is opened lock lever cannot be moved to opposite position to release switch for hand throwing until indicator in lock box indicates "unlocked".

Lock lever must not be returned to locked position until all movements over the switch are completed, switch returned to normal position and locked, after which lock box door must be closed and locked. Within C.T.C. limits dispatcher must also be notified by telephone when completed.

When switch indicators indicate "block occupied", instructions posted inside lock box for operation of push button to start time-release must be complied with if movement is to be made to main track while approach circuit is occupied by another train, in addition to providing flag protection when necessary.

Emergency lock release to be used only in case of electrical or mechanical failure, as indicated by failure of time-release to function after several minutes. When necessary to break seal on emergency lock release, dispatcher must be notified immediately, and movement made only after flag protection provided on both tracks.

Low type electric locks, such as are applied direct to lever of hub type switch stands, function as above except that the removal of the switch padlock has the same effect as opening the lock box door. Instead of being equipped with an "unlocked" indicator, these locks have a pilot light that indicates by illumination when the lock is unlocked.

When pilot light will not illuminate to indicate electric lock is unlocked, push button on adjacent cast iron box, protected with cover and locked with switch padlock, should be depressed to illuminate green light. After a time interval of from one to seven minutes pilot light on electric lock will be illuminated, indicating lock is unlocked.

Emergency lock release is applied to side of electric lock. It is to be used only in case of electric or mechanical failure, as indicated by failure of time release to function after several minutes. When necessary, break seal and operate emergency lock release by turning knob one-half turn to right. Dispatcher must be notified immediately and movement made only after flag protection is provided on both tracks.

RULE 535. A spring switch with facing point lock must not be trailed through unless switch target displays the letters "SS" in normal position, or switch has been lined for the movement.

When a signal with triangular number plate protecting a spring switch with facing point lock displays stop indication, member of crew must open and close spring switch by hand, removing any obstruction. If signal does not then display proceed indication, switch must be hand thrown for the movement.

When a spring switch or spring derail is hand thrown, trainman so setting same must again set it for normal position after movement has been completed, unless he has arranged for another trainman to do so.

RULE 536. Wheels of tenders must not be considered as engine wheels.

RULE 605. INTERLOCKING

Trains and engines must not enter main track within interlocking limits where no signal governs such movement until permission has been obtained from signal operator, and must then run with caution not exceeding 12 MPH to the next signal.

Movements governed by short-arm or dwarf signals must be made with caution and position of switches observed, as such signals govern movements for various routes.

At all interlockings, when route lined is not to be used, following signal will be sounded by engineers: o o — o o.

GENERAL REGULATIONS

RULE 822. Riding on leading foot-board or pilot step of engine when passing over highways, crossings or on streets is forbidden.

RULE 825. Fifth paragraph applies to wooden outfit cars the same as to other cars, except that diner should not be separated from kitchen car

RULE 827. TRAIN INSPECTION

Trains, including military trains, made up in part of freight cars or caboose equipped with cast iron wheels are required to comply with rules and timetable instructions applying to freight trains as they relate to stopping for train inspection, and speed restrictions.

Cars bearing placards denoting contents are explosive, inflammable, poisonous, or otherwise dangerous, must be given careful inspection at all points where train inspection is made.

On freight trains, when conditions are favorable and in judgment of conductor it is safe, run may be made without stopping for inspection from one water stop to next water stop, except that a distance of seventy (70) miles must not be exceeded between inspections.

RULE 849. Steam valve on Pullman troop sleepers cannot be opened while train is in motion, and when such car is on rear of train steam line must not be cut in any portion of train until valve is closed on the car on each side of coupling to be opened, to avoid burning by steam.

RULE 851. When necessary to discharge passengers on left side of train on double track, trainmen must caution passengers that trains may approach on opposite track, and use precaution to avoid injury.

RULE 873. Sanders must not be operated within 150 feet of any power operated switch.

AIR BRAKE RULES

RULE 9. Passenger trains of more than 25 cars must be handled under freight train rules.

MISCELLANEOUS

4. Helper service:

No helper engine will be placed behind wooden underframe cars or cabooses.

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

In no case will more than one helper engine be placed behind steel underframe cabooses.

Except as provided below, one helper may be placed on head end, but not more than two engines will be used on head end of any freight train. When additional helpers are required, they will be placed back in train, and cut in ahead of any cars of wooden frame construction. Westward between Tracy and Niles if train consists of more than 49 cars, and eastward if train consists of more than 75 cars when only one helper is required it will be placed on rear ahead of caboose and any wooden frame cars, and when practicable should be placed behind a loaded car.

Where coupling of engines is not permitted, such engines must be separated by at least ten cars.

Air will be cut in all helper engines, and engine must not be cut off when train is in motion.

When used as helpers, AC, AM or MM class engines must not be coupled together, nor may more than two F, Mt, or heavier class be coupled together. When coupled in rear of train, larger engines must be placed ahead of smaller engines. If tonnage requires more power, additional helpers of not to exceed two coupled in each case, must be separated by at least four cars.

Helpers must not be operated backing except in emergency, and in such case engines should not push through a backing engine if it can be avoided.

Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water. On grades, road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

4 (a). Pushing trains out of yards:

No engine will be placed behind a wooden underframe caboose or other wooden frame equipment.

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

Air will not be coupled through pusher engine, except when pushing trains between Port Costa and Bahia, air must be coupled through pusher engine. Eastward trains must stop with rear of train to clear Upper Crossover to cut pusher engine off.

Other yard engines regularly so used will be equipped with Russell-Jordan device to hold coupler pin from dropping, thus making it unnecessary for employes to uncouple pusher engine when cutting off.

In no case shall knuckle be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.

7. Capacity of sidings column indicates the number of cars of average length of 49 feet that siding will hold between fouling points, in addition to one engine and caboose.

10. When a sign reading "Occupied Outfit Cars" is attached to switch lock, the outfit cars must not be coupled to, nor moved, until occupants have been notified, and permission given by foreman or his representative.

Engines having blind drivers must not exceed 6 MPH over switches having self-guarded frogs and switch-point protectors.

20. Handling of freight cars in trains behind passenger cars is prohibited except passenger equipment may be placed in head end of mixed trains when carrying personnel and equipment in connection with military and naval movements. This does not refer to a baggage, express, or mail car, or a caboose.

Baggage, express, mail, refrigerator or other head end cars must not be handled on rear of passenger trains unless trainmen can pass through, except between Oakland Pier and Pittsburg.

21. Employes are warned that it is dangerous to ride on top or sides of cars while passing points where impaired clearance exists, and that they must protect themselves from injury.

There are numerous structures with impaired clearance on yard and station tracks on the division, and employes must be familiar with their locations and avoid personal injury.

SPEED RESTRICTIONS

List of CCB (cross-counterbalanced) engines:
All F-1 class, except engs. 3618, 3639.
All F-3 class.
All F-4 class, except eng. 3700.
All F-5 class.
All B class, except engs. 3501, 3502, 3504, 3505, 3508, 3509.

MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Maximum speed for S and SE class engines, 20 MPH, but must not exceed speed permitted freight and mixed trains and light engines.

Steam or Diesel-electric engines backing must not exceed 20 MPH on all curves, and when approaching highway crossings at grade.

Steam engines coupled tender to tender must not exceed speed permitted same engines running light backward.

Engines with tenders having water capacity 7,000 gallons or less, except Classes 70-R-1 and 70-SC-1, must not exceed 50 MPH.

Maximum speed of engines under following conditions, running under own steam or hauled in train, must not exceed:

When all weight has been removed from any one pair of drivers	20 MPH
When all weight has been removed from only one wheel from any pair of drivers	30 MPH
When engine truck is removed	20 MPH
When main rod only is removed	30 MPH
When side rod only is removed	30 MPH
When both main and side rods are removed	20 MPH
When hauled in train with all rods on	30 MPH

When train order is received indicating that main track is out of service and that trains are to be detoured through a siding or other track, or over a shoofly, necessitating a reduction in normal train speed, signal 16(f) must be sounded on passenger trains one mile before reaching point where train must reduce speed, which must be acknowledged by whistle signal 14(g).

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT

	MPH
Trains handling wooden pile-drivers; locomotive cranes with boom disconnected and heavy end forward; steam shovels and ditchers transported on their own wheels; and car-top ditchers when blocking and tie-down cables are removed:	
On tangent main tracks, except	35
SPMW 4044	25
On tangent branch tracks	25
On all curves 5 MPH less than speed authorized. Where speed boards in place, 5 MPH less than shown on speed boards, except where speed indicated is 15 MPH or less be governed by speed boards.	
Trains handling locomotive cranes with boom disconnected and light end forward (must not be handled in this manner except in emergency):	
On tangent main tracks	20
On curves and on branch tracks	15
Trains handling locomotive cranes with boom in place, either end forward (to be handled in work train when practicable):	
On tangent main tracks	25
On curves and on branch tracks	15
Trains handling steel pile-drivers may make maximum restricted freight train speed.	
Trains handling relief outfit with steam derrick:	
On tangent main tracks	35
On tangent branch tracks, except	25
Nos. 7000 and 7010 on San Ramon Branch	10
Nos. 7000 and 7010 must not operate between Larkmead and Calistoga on Napa Branch.	
Nos. 7000 and 7010 must not operate between Edwin and Ione on Ione Branch unless authorized by Superintendent. If movement authorized, speed of 15 MPH must not be exceeded.	
Nos. 7014 and 7025 must not operate on any branch except Schellville Branch; Napa Branch between Suisun-Fairfield and Napa River Bridge 45.62 at Napa; and on Vallejo Branch between Napa Jct. and MP 30.6.	
On all curves, 5 MPH less than speed authorized. Where speed boards in place, 5 MPH less than shown on speed boards, except where speed indicated is 15 MPH or less be governed by speed boards.	

Passenger trains handling steel wheel baggage-express cars in series 5810 to 5874, and foreign line steel wheel cars not equipped with high speed trucks, must not exceed 60 MPH.

Wooden equipment must not be handled in regular passenger trains.

Extra passenger trains handling wooden coaches or chair cars must not exceed 40 MPH.

Trains pushing or backing passenger equipment must not exceed 15 MPH.

The following head-end cars will be considered streamlined equipment: 4119, 5065 to 5070, 5123 to 5125, 5127 to 5138, 5161 to 5163, 6029, 6083, 6085, 6204, 6448.

Maximum speed of deadhead equipment or passenger trains with standard caboose is 50 MPH.

Trains consisting of steam or Diesel-electric engine and caboose only must not exceed speed permitted for engines of that class running forward light; such trains must not, in any case, exceed 40 MPH.

No. 335 (CMW), No. 336 (CME), Nos. 444 and 442 (CCM) and No. 402 (BM) may make maximum speed of 50 MPH using ordinary box cars, in territory where maximum freight and mixed train speed is shown as 40 MPH.

RULE 10 (J). Round yellow speed boards indicate by black figures the speed restrictions applying to Diesel-powered Streamliner Nos. 101 and 102.

RULE 11 (A). Lighted fusees must not be left burning on Suisun Bay bridge.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Martinez......Trains on Tracy line.

RULE 14 (e). As specified below, — — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Martinez ....Trains on Tracy line.
Napa Jct.........Trains on Schellville line.
Suisun-Fairfield...Trains on Napa Jct. line.
Davis ....Trains on Woodland line.

RULE 14 (m). Whistle will not be sounded one mile before reaching stations between Oakland Pier and San Pablo.

RULES 17 and 17 (C). Headlights of engines standing at end of wharf at Oakland Pier must be extinguished when steamers are entering slip. Headlights of eastward trains must be extinguished while standing at Oakland Pier and dimmed until Oakland Pier Tower has been passed.

RULE 21 (C). Passenger engines to handle trains from Oakland Pier may display indicators before leaving West Oakland.

Indicators of engines on trains arriving Oakland Pier may be displayed until engine reaches roundhouse at West Oakland, and must be removed immediately on arrival at delivery track.

RULE 30. Between the hours of 9:00 PM and 6:00 AM engine bell must not be rung, except in emergency, in city limits of Napa.

RULE 82 (A). Second and third-class and extra trains to or from Western Division passing Sacramento will not obtain clearance at Sacramento.

Trains enroute Western Division via Sacramento or Brighton originating at Roseville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed Western Division. Train orders addressed to such trains at Roseville will apply the same as if addressed to them at Brighton or Sacramento.

RULE 83 (A). At the following stations only trains indicated will register:

West Oakland	Trains originating or terminating
Port Costa	
Suisun-Fairfield	
Davis	
Avon	
Pittsburg	

Sacramento. Trains originating or terminating, except second and third-class and extra trains passing Sacramento to or from Western Division.

Sacramento, 12th St. Eastward trains via Brighton and trains originating or terminating.

Extra trains will register at Napa Jct.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:

Davis......All trains to or from West Valley Subdivision, Sacramento Division.

RULE 84. Proceed signal 12 (c) must be used to start trains from Oakland Pier, except Streamliner No. 102 when communicating signal may be used.

RULE 93. When freight cars are moved from one point to another on main track within Oakland yard limits at night, a red light must be displayed on rear of rear car.

Yard limits in which the provisions of Rule 93 will apply are established at the following points:

West MP			East MP
	Oakland	(Martinez line)....................	17.35
	“	(Niles line)....................	15.82
	“	(Alvarado line)....................	14.01
27.97	Port Costa....................		39.24
	“	(Benicia spur)....................	End track
	“	(Tracy line)....................	37.08
47.05	Suisun-Fairfield		52.45
	“	(Napa Jct. line)....................	45.75
74.20	Davis		77.37
	“	(Tehama line)....................	77.39
85.51	Sacramento....................		95.35
131.60	“	(Stockton line)....................	136.33
37.50	Avon		38.90
	“	(San Ramon Branch)....................	39.35
39.53	Port Chicago....................		42.93
46.31	Pittsburg		51.68
61.00	Brentwood		62.70
80.70	Tracy	(Martinez-Los Banos line)....................	85.64
69.19	“	(Niles-Lathrop line)....................	74.37
39.14	Napa Jct.	(Creston-Calistoga line)....................	38.21
	“	(Schellville line)....................	38.86
	“	(Vallejo line)....................	36.37
44.34	Napa		46.46
70.82	Calistoga		End track
47.72	Schellville	(Lombard-Ignacio line)....................	38.94
	“	(Sonoma line)....................	49.70
31.81	Vallejo		End track
75.00	Winters		78.00

RULE D-97 (A). Will apply between following points:
Oakland Pier and Sacramento;
Martinez and Mococo.

RULE 98. Railroad crossings at grade not interlocked:

Trains and engines must approach with caution, and may move over the following crossings without stopping, if crossing clear and no movement approaching on intersecting line:

Benicia. Government Ry., crossing of Benicia spur near Benicia arsenal. If signal 340 or 341 displays stop indication, flag protection must be provided on intersecting track before movement made over crossing.

Napa Jct. Big balloon track crossing of Calistoga-Vallejo main track. Schellville line trains using big balloon track need not stop.

Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

Napa Jct. Calistoga-Vallejo main track crossing of big balloon track. Calistoga-Vallejo line trains must stop.

Las Juntas. SNRy, crossing of San Ramon Branch.

RULE 103 (A). Bates. When any of the crossovers are used in vicinity of MP 11, switches must not be left open longer than necessary to complete move, as automatic crossing gates at Buchanan St., Albany, will remain down as long as one of these switches is open.

Suisun-Fairfield. When necessary for freight trains to make stop blocking crossings east of passenger station, they must be opened with least possible delay.

Napa. When switching on or across any street crossing, city ordinance requires that member of crew must protect crossing.

Public Utilities Commission orders require that trains and engines must stop, and member of crew must protect traffic on the following street or highway crossings before movement is made:

Suisun-Fairfield..Crossing Union Ave. when on siding, or when moving against current of traffic.
Thomann ....Crossing highway on Napa Valley Cooperative Winery spur.
Vacaville ....Crossing on Standard Oil spur.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Avon	San Ramon line, for siding.
Suisun-Fairfield	Napa Jct. line, for westward siding.
Napa Jct.	Schellville line, for Calistoga-Vallejo line at MP 37.35.
Napa Jct.	Suisun-Fairfield line, for Vallejo line, at MP 37.25.
Union	Crossover switch near west end siding, for West Napa line.
Schellville	Napa Jct. line, for NWPRR main track.
Tracy	Niles line, for Martinez line.
Tracy	End double track, for eastward track.
Tracy	Los Banos line, for Niles line.

Napa Jct. Track known as little balloon is Schellville line main track, but east switch of little balloon track must be left lined for through movement between Schellville line and big balloon track.

Wye connection between Suisun-Fairfield line and Calistoga line is not main track, and switches at each end of this wye track must be left lined for the respective main track movements.

RULE 104 (A). Conductors and engine foremen must personally know that main track switches used by them are left locked when clearing main track for Streamliner Nos. 101 and 102.

RULE 105. Suisun-Fairfield. Eastward siding is first track south of eastward main track and leaves eastward main track 2280 feet east of MP 47; westward siding is first track north of westward main track and leaves westward main track 3000 feet west of MP 50; westward trains entering this siding will use crossover just west of freight house.

Davis. Eastward siding is first track south of eastward main track and enters eastward main track 1200 feet east of Davis Tower. Westward siding is first track north of westward main track and enters westward main track 1960 feet west of MP 77.

Port Chicago. North siding is first track north of main track (on bay side), and south siding is first track south of main track. These sidings may be used by trains in either direction, or as directed by train dispatcher.

RULE 107. Station train indicators west of Crockett and Martinez displaying the illuminated word "Train", indicate a passenger train on westward track at station.

RULE 221. Light will not be displayed in train-order signals on Winters, Napa and San Ramon branches, except when train-order operator is on duty.

Trains must obtain clearance before leaving Napa Jct. and Napa.

Shellmound is train-order office for eastward second-class, third-class and extra trains only. When SA Signals on eastward track or freight lead indicate proceed, such trains must approach prepared to receive train orders.

Eastward second and third-class and extra trains must obtain clearance before leaving Shellmound.

West Oakland and Avon are train-order offices for trains originating only.

RULE D-251. Will apply as follows:

On westward track Sacramento to Davis train-order office, provided proceed signal received from yardman at Front St., Sacramento (green flag by day, green light by night), except will not supersede the superiority of No. 101.

Proceed indication displayed by train-order signal at Davis and by eastward interlocking signal east of Davis Tower will be authority for eastward second and third-class and inferior trains to move irrespective of timetable superiority of No. 15 from Davis to Sacramento.

RULE 505. AUTOMATIC BLOCK SYSTEM

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

Eastward movements governed by dwarf light signals 710, 712, 714.

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

Westward freight trains stopped by Signal 717, located east of overhead crossing east of Tracy, use telephone located on this signal, call switch tender at puzzle switch and be governed by his instructions.

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

RULE 510. Following block signals equipped with a triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signals		Westward Signals
P-374	Spring switch, Napa Jct.	
P-356 P-358	Spring switch, Mococo	P-359
P-470	Collision detector, highway underpass, MP 47.19 (Pittsburg)	P-479

RULE 516. Overlap posts:

Port Chicago	Eastward trains.
Nichols (150 feet east of west switch)	Eastward trains.
Los Medanos (250 feet west of Signal 509)	Westward trains.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows, and speed indicated in Speed Restrictions table must not be exceeded while passing over them in facing movement, or in trailing through them:

Location		Normal Position
Mococo	End double track	Westward track

Spring switches not equipped with facing point locks are located as follows, and speed indicated in Speed Restrictions table must not be exceeded while passing over them in facing movement, or in trailing through them:

Location		Normal Position
Pinole	West end westward siding	Westward track
Martinez	Junction switch	Bridge line
Napa Jct.	West end big balloon	Suisun-Fairfield main track

Double switch indicator installed near spring switch at Pinole. Movements out of this siding must be made in accordance with provisions of tenth paragraph of Rule 99, Rules 512 (A) and 513.

Spring switches are also located on other tracks as follows:

West Oakland. Two on incoming engine leads, east of roundhouse; two on outgoing freight engine lead, near tin shop, and one on outgoing engine lead west of roundhouse.

Oakland Pier. West end of tracks 4, 5 and 6.

Stege. On stem of wye.

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

On double track within Oakland yard limits signal operator may arrange to move trains from one tower to another against the current of traffic, after having an understanding by telephone for each movement. Before moving trains against current of traffic signal operator must know that track to be used is clear of opposing engines and trains.

Oakland Pier. Limits extend eastward to automatic Signal 40 on eastward main track and to home signal 450 feet east of Signal 40 on westward main track on Martinez line, and to automatic Signal 42 on both main tracks on Niles line, and on yard tracks 9 and 10 to Signal 44; and on yard tracks 11, 12 and 13 to home signal 175 feet east of Maritime overpass.

When siren whistle is sounded, all movement must stop and await proper signal.

The last signal governing movement into any track except tracks 17, 18, 19 and 20 is a two-arm dwarf signal. When home signal displays proceed indication, and approach signal displays yellow aspect, it indicates that movement is to be made into a track occupied by engines or cars. Responsibility for collision will rest with train or engine entering.

Sixteenth St. Tower, Oakland. Limits extend from eastward signal 1500 feet west of 14th St., to Signal Bridge 204.

Whistle signals:
To West Oakland yard, o — —.
From AT&SFRy interchange to Oakland Pier, —.
To AT&SFRy interchange, o — o.

Telephone to Sixteenth St. Tower and West Oakland Tower are on lattice pole 1733, 250 feet east of Signal Bridge 200, and on signal case 30 feet west of junction of freight tracks 1 and 2, to be used when necessary to obtain permission to pass signals as prescribed by Rule 663 (b).

Within limits of Sixteenth St. Tower, Oakland, trains may occupy main track without rear end protection, except that flagman must take position not less than thirty feet behind a train carrying passengers. Signal operator must not authorize a train to pass an interlocking signal displaying stop indication until he has assured himself that conductor and engineer of all trains involved are fully acquainted with intended move so that proper protection will be provided.

Shellmound. Limits extend from Signal Bridge 205 to Signal Bridge 206.

Whistle signal:
To West Oakland yard from freight track 2, o — —.

Martinez. Limits extend on eastward main track from home signal 600 feet east of station building to westward dwarf signals 938 feet east of station building on Tracy line and on Suisun Bay bridge line.

Limits extend on westward main track from signals 2350 feet east of station building on Tracy line and on Suisun Bay bridge line, to Signal 343 at east end of Ozol siding. Crossover switches west of station building, and switches leading from spurs to westward main track within these limits are not interlocked, and permission of signal operator must be obtained before fouling westward main track at any of these switches.

Whistle signals:
To Bridge line, o — —. To Tracy line, — o —.

Suisun Bay Bridge, Martinez. Bridge zone limits extend on both tracks from home signals 800 feet east of draw span to home signals 550 feet west of draw span.

East end zone limits extend on eastward track only, from semi-automatic signal near upper crossover to westward dwarf signal at Benicia line connection.

Signal operator's permission must be obtained before moving from Benicia line to eastward main track; then if switch indicator indicates block clear, derail and junction switch may be thrown and movement governed by dwarf signal.

Upper crossover is not interlocked, but movement must not be made through crossover without signal operator's permission, unless switch indicator indicates block clear. Signal 345 will govern movement through crossover.

Davis. Limits on eastward and westward main tracks extend from home signal 2200 feet west of tower to signal bridge 1700 feet east of tower, and on Woodland line to signal bridge 1200 feet east of tower.

Whistle signals:
To or from Sacramento from or to Woodland line, o — —.
Western Division eastward trains to enter siding, — o —.

Within Davis interlocking limits trains may occupy main track without rear end protection, except that flagman must take position not less than thirty feet behind a train carrying passengers. Signal operator must not authorize a train to pass an interlocking signal displaying stop indication until he has assured himself that conductor and engineer of all trains involved are fully acquainted with intended move so that proper protection will be provided.

Mikon. SNRy crossing. Signal operator on duty 8:30 AM to 5:30 PM, less meal hour, daily except Sunday and holidays. During other hours signals and derails lined for SP movement.

Sacramento River Drawbridge. Eastward trains failing to receive green aspect in approach Signal 878 must stop west of city limit sign, 1030 feet east of Signal 878, unless semi-automatic signal indicates "proceed".

Brazos Drawbridge over Napa River. Signal operators on duty 12:01 AM to 4:00 PM. No movement over bridge permitted during other hours unless signal operator on duty. Derails in main track within interlocking limits east and west of draw span.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illuminated Letter	On Signal	Approaching	Authorizes and Requires Movement as Follows
S	767	Davis	Enter westward siding (applies to freight trains only).
M	245	Pinole	Proceed to Shellmound.
S	245	Pinole	Enter westward siding.

GENERAL REGULATIONS

RULE 824. Tracy. Before engine is detached when train stops on yard track on Martinez side, not less than four hand brakes must be set on west end of train.

RULE 825. Tracy. Train crews must not release brakes on outbound trains until engine is coupled and brake pipe is charged.

RULE 827. TRAIN INSPECTION

Passenger trains operating between Oakland Pier and Gerber making station stop at Davis, must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes, and entrain on station side.

AIR BRAKE RULES

RULE 2. Running test must be made immediately after engine is detached from trains arriving Oakland Pier.

RULE 17. Retainers must be used on freight and mixed trains as follows:

One retainer for every 160 Ms in train, San Ramon to Walnut Creek.

With 20 or more cars and tonnage averaging over 150 Ms per operative brake, use 10 retainers on head end of train, or more if requested by engineer, Creston to Napa Jct., and Creston to Cordelia.

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:

Napa Jct.......Trains via Cordelia.
Cordelia.......Eastward trains that stop.
Creston ....Trains that stop.

Freight trains may pass Creston without stopping for rear end test if proceed signals are given by trainmen after complying with Air Brake Rule 4. Speed must be reduced to 8 MPH. Helper engineers will reduce working steam sufficiently in advance so that lead engineer may control speed by gravity.

PASSENGER TRAINS

RULE 39. Running test must be made as follows:

Westward trains for Oakland Pier, at 16th St. station, Oakland.

Equipment being handled between Oakland Pier and West Oakland, in either direction, as soon as practicable after starting.

Eastward trains via Bahia, at Martinez, but **may be made at** Ozol if no stop is to be made at Martinez.

Westward trains, at Bahia.

Eastward and westward trains at Creston.

MISCELLANEOUS

1. Emergency water supply only, at Pittsburg.

Water supply at Bahia for yard engines. If necessary for road engines to take water, take only enough to reach next water supply.

Eastward freight trains take water at Davis in preference to Swanston.

Take water at Vallejo, Napa or Cordelia instead of at Napa Jct., if practicable.

4 (a). When eastward freight train is to pick up pusher engine at Port Costa, train brakes must be applied on arrival, and must not be released until pusher engine has coupled in.

5. The working track between Port Costa and MP 28.2 west of Crockett may be used by westward freight trains, displaying markers as per Rule 19, same as though moving against current of traffic.

6. Engines or trains using wye at Napa Jct. must approach from Suisun-Fairfield line and go around via Napa line.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Engines over 162,000 pounds on drivers	Cordelia—Winery spur.
"	Napa Jct.—Calistoga line wye.
All	Ramal—Beyond stock chute on corral.
T-23, 26, 28, 31, 32, 37, 40, 58, P, A, Mk	Vacaville—Except main track and Pacific Fruit Exchange spur.
GS, F, SP, AM, MM, AC, and Eng. 2371.	Tremont—Corral track.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Newlove—Spur.
"	Tracy — Brewery track; Holly Sugar spur.

Load limit (car and contents):

Oakland-Sacramento	240,000 pounds
Martinez-Tracy	240,000 pounds
Suisun-Fairfield-Napa Jct.	210,000 pounds
Napa Jct.-Larkmead	210,000 pounds
Larkmead-Calistoga	169,000 pounds
Union-West Napa	210,000 pounds
Napa Jct.-Schellville	210,000 pounds
Napa Jct.-Vallejo	210,000 pounds
Elmira-Winters	210,000 pounds
Winters-Esparto	169,000 pounds
Avon-Radum	210,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

15. Trains must not pass switchtenders' stations at Sixth and Seventh Streets, Sacramento, without receiving signal from switchtender to proceed (green flag by day and green light by night) and must move with caution between Sacramento River bridge and Seventh Street.

LOCATIONS WHERE SPEED BOARD RESTRICTIONS APPLY TO ONE OR MORE CURVES, STRUCTURES, OR EXTENDED SECTION OF TRACK.

For Eastward Trains			For Westward Trains		
Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP	Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP
OAKLAND-SACRAMENTO					
18.3	19.1	20.1	18.1	17.3	7.0
19.7	20.4	20.9	20.8	20.1	19.1
20.9	21.5	27.9	34.4	33.6	33.5
32.8	33.5	33.6	36.3	35.5	27.9
36.4	37.1	37.3	49.8	49.1	47.1
46.3	47.1	49.1	55.8	55.2	54.4
53.6	54.4	55.2	78.1	77.4	74.2
73.5	74.2	77.4			
87.5	87.8	88.8			
88.0	88.8	89.0			
MARTINEZ-TRACY					
35.0	35.9	35.9	37.0	36.0	34.6
80.0	80.7	82.1			

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description	
3.5	Oakland Pier	Posts supporting trainshed	Side
6.6	Emeryville	W. U. pole line, near Park Ave	Side
14.5	Richmond	AT&SFRy overhead bridge	Overhead
16.0	San Pablo	AT&SFRy overhead bridge	Overhead and side
16.6	San Pablo	Westward water column	Side
22.1	Pinole	Rock bluff, eastward track	Side
23.7	Hercules	Industrial Ry overhead bridge	Overhead
24.4	Hercules	Rock bluff, eastward track	Side
26.7	Oleum	Tunnel No. 1	Overhead and side
27.7	Selby	Tunnel No. 2	Overhead and side
31.2	Port Costa	Water column, eastward track	Side
34.7	Martinez	Alhambra slough bridge	Side
33.3	Martinez	Suisun Bay bridge, vertical pipes	Side
37.2	Bahia	Wagon bridge, westward track	Overhead
38.0	Bahia	Water tank spout, eastward track	Side
59.4	Elmira	Water column, eastward track	Side
75.8	Davis	Signal bridge, Woodland line	Overhead
88.5	Washington	Sacramento River drawbridge	Side
63.6	Vacaville	Ulatis Creek bridge	Side
75.8	Winters	Putah Creek bridge	Side
76.0	Winters	Water tank spout	Side
46.5	Thomasson	Suisun Creek bridge	Side
46.0	Thomasson	Tunnel	Overhead
67.5	Bale	Water tank spout	Side
69.5	Maple	Napa River bridge	Side
37.9	Avon	Pacheco slough bridge	Side
43.1	Nichols	Wagon bridge	Overhead and side
43.2	Nichols	AT&SFRy overhead bridge	Overhead and side
48.8	Pittsburg	Signal bridge	Overhead
40.7	Brazos	Drawbridge over Napa River	Side
42.5	Concord	Water tank	Side
44.6	Hookston	Walnut Creek bridge	Overhead and side
45.8	Las Juantas	SNRy trolley wires	Overhead
49.2	Walnut Creek	San Ramon Creek bridge	Overhead and side
57.0	San Ramon	San Ramon Creek bridge	Overhead and side

Windows of occupied passenger cars must be kept closed, and passengers warned of close clearance when passing over Napa River drawbridge at Brazos.

SPEED RESTRICTIONS

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:	15
With engine backing	10

MAXIMUM SPEED PERMITTED WHEN HANDLING CERTAIN EQUIPMENT

Streamliner Nos. 101 and 102 must not exceed speed permitted other passenger trains when operating against the current of traffic, or when handled by steam power.

SPEED RESTRICTIONS: Maximum speed of trains with engines of various classes is shown below. Trains with engines not listed must not exceed 35 MPH. Speed must be further restricted as required by speed boards, and may be exceeded only as authorized by special instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE ABSOLUTE SAFETY, REGARDLESS OF TIME.

TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD										LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
	PASSENGER								*FREIGHT AND MIXED							
	DEP with Streamlined CITY OF SAN FRANCISCO	DEP P-7-8-10-12 A Mt GS	DEF E P-1-3-4-5-6-11	T-26-32-37-40 AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB) SP B (if CCB)	AM B (if not CCB)	DES 1 to 7 DES 100 to 107 C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB) AC-1-2-3	C-15-17-32 Mk-10-11 MM	With no Restricted Cars (see note)	With Restricted Cars (see note)	DEP DEF E P A Mt GS	DES 1 to 7 DES 100 to 107 T-26-32-37-40 Mk-5-6-7-8-9 F (if CCB) AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB) SP B	DES-200 C-15-17-32 TW Mk-2-4-10-11 AC-1-2-3 AM MM	DES DEP DEF E T P C TW A Mk F Mt GS SP B	M AC AM MM
COLUMN:	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Between Oakland Pier and Sacramento, except	95	70	65	60	50	45	40	35	50	40	45	40	35	30	30	25
Oakland Pier-MP 7.00 (Shellmound), except	45	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
Across freight leads to West Oakland	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Across main track on freight leads to West Oakland	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
MP 7.00-MP 16.31, except	45	45	45	45	45	45	40	35	40	40	40	40	35	30	30	25
*MP 11.42-MP 16.00 (Richmond city limits)	45	45	45	45	45	45	40	35	40	40	40	40	35	30	30	25
MP 16.31-MP 21.50	80	65	65	60	50	45	40	35	40	40	40	40	35	30	30	25
MP 21.50-MP 27.90 on tangents	60	50	50	50	50	45	40	35	40	40	40	40	35	30	20	20
MP 21.50-MP 27.90 on curves	45	40	40	40	40	40	40	35	35	35	35	35	35	30	20	20
MP 27.90-MP 35.50, except	45	45	45	45	45	45	40	35	30	30	30	30	30	30	20	20
Martinez westward over spring switch junction Tracy line with westward track	35	35	35	35	35	35	35	35	30	30	30	30	30	30	20	20
Martinez eastward on westward track over spring switch at junction Tracy line	25	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20
*Over grade crossings, Martinez city limits, except	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
*Eastward trains via Suisun Bay bridge 33.3	20	20	20	20	20	20	20	20	30	30	20	20	20	20	15	15
Over span No. 12 (lift span) Suisun Bay bridge 33.3	30	30	30	30	30	30	30	30	30	30	30	30	30	30	20	20
MP 35.50-MP 47.00	75	65	65	60	50	45	40	35	50	40	45	40	35	30	30	25
MP 47.00-MP 49.00	45	45	45	45	45	45	40	35	30	30	30	30	30	30	20	20
Dixon, over crossings east and west of station bldg	70	70	65	60	50	45	40	35	40	40	40	40	35	30	30	25
MP 74.20-MP 77.30	45	40	40	40	40	40	40	35	30	30	30	30	30	30	20	20
MP 85.50-Sacramento, except	45	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
Mikon, over SNRy crossing	40	40	40	40	40	40	40	35	30	30	30	30	30	30	20	20
MP 87.80-Sacramento River drawbridge	35	35	35	35	35	35	35	35	30	30	30	30	30	30	30	25
Over Sacramento River drawbridge	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Between Martinez and Tracy, except		70	65	60	50	45	40	35	50	40	45	40	35	30	30	25
Martinez to Mococo on eastward track		45	45	45	45	45	40	35	30	30	30	30	30	30	20	20
Mococo to Martinez on westward track		30	30	30	30	30	30	30	20	20	20	20	20	20	20	20
Mococo, eastward over spring switch end double track		35	35	35	35	35	35	35	30	30	30	30	30	30	20	20
Mococo, westward over spring switch end double track		30	30	30	30	30	30	30	20	20	20	20	20	20	20	20
*Pittsburg, over Railroad Ave		25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
MP 80.70-C St. crossing, Tracy		45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
C St. crossing-Tracy psgr sta		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

***Regulated by city ordinance.**

***Freight and mixed trains with an engine listed in columns 5, 6 or 7 must not exceed maximum speed permitted the same engine when handling passenger train.**

(Note) RESTRICTED CARS: Twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed permitted with Certain Equipment"; scale test cars; and cars with arch-bar trucks.

When electro-pneumatic brakes are inoperative, maximum speed of 95 MPH shown in Column A, and permissible speed as indicated on round yellow SIGNAL speed boards, must be reduced by 5 MPH.

Nos. 51 and 52, handling streamlined equipment with P-7-8-10-12 or Mt class engine equipped with electro-pneumatic brakes functioning on engine and all cars, may run not to exceed 75 MPH in territory where maximum speed of 70 MPH is authorized in Speed Restrictions table.

DES 1 to 7 and DES 100 to 107 may make maximum of 40 MPH in territory where 30 MPH is authorized in Column 14.

TERRITORY	PASSENGER	FREIGHT AND MIXED	LIGHT ENGINE RUNNING FORWARD	ENGINE BACKING WITH TRAIN OR LIGHT
Between Avon and Radum, except	15	15	15	15
Over bridges 44.64, 49.22 and 56.99	10	10	10	10
Between Suisun-Fairfield and Calistoga, except	40*	25	30	20
Cordelia-Napa Jct	35	25	25	15
Napa Jct.-MP 53.50, except	25	25	15	15
MP 39.75-MP 40.25	15	15	15	15
*MP 45.20-MP 47.10 (Napa city limits)	25	25	15	15
MP 53.50-Calistoga	20	20	15	15
*Charter Oak-Fulton Sts., St. Helena (city limits)	20	20	15	15
Between Napa Jct. and Schellville, except	25	25	25	15
Over Napa River drawbridge at Brazos	10	10	10	10
On Schellville wye	10	10	10	10
Between Napa Jct. and Vallejo, except	25	25	15	15
Over Tennessee St. crossing, Vallejo	15	15	15	15
Between West Napa and Union	8	8	8	8
Between Elmira and Esparto, except	25	25	25	15
Winters-Esparto	15	15	15	15

*Regulated by city ordinance.

***C-15-17-32, Mk-10-11 and MM-3 class engines must not exceed 35 MPH.**

MARTINEZ SUBDIVISION

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Oakland and Martinez Martinez and Tracy	Martinez to Bridge Summit	Bridge Summit to Sacramento	Sacramento to Martinez	Suisun-Fairfield to Napa Jct.	Napa Jct. to Suisun-Fairfield	Napa Jct. and Larkmead Union and West Napa	Larkmead and Calistoga
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	3200	1000	2150	1950	....	....	....	....
DES-100 to 107	1300 to 1395	4500	1600	3350	3100	....	....	....	....
E-23	1500 and 1502	3350	1400	2950	2800	800	1100	1300	1300
M-4	1617 to 1713	4450	1900	3900	3700	1100	1500	1800	1800
M-6, 8	1721 to 1803, 1823 to 1825	5250	2250	4550	4350	1300	1800	2100	....
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	5500	2400	4850	4600	1400	1900	2250	....
M-11	1832 to 1835	5700	2500	5000	4800	1450	2000	2300	....
T-1	2242 to 2271	3800	1650	3300	3150	950	1300	1500	1500
T-8, 9	2161, 2174 and 2178	2750	1150	2400	2250	650	920	1050	1050
T-23	2301 to 2310	5500	2350	4800	4550	1350	1900	2200	....
T-26	2283 to 2299	4800	2000	4200	3900	1150	1600	1900	....
T-28, 31	2311 to 2362	6000	2600	5250	5000	1500	2100	2450	....
T-32, 40	2363 to 2384	6150	2600	5350	5000	1500(A)	2100(A)	2500(A)	....
T-36	2103	4050	1750	3550	3400	1000	1400	1650	1650
T-37	2105 and 2106	5450	2350	4800	4600	1350	1900	2200	....
T-57, 58	2385 and 2386	4950	2150	4300	4100	1250	1700	2000	....
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	4950	2050	4300	4000	1150	1600	1950(D)	....
P-1	2400, 2403 to 2407 and 2415	4950	2150	4300	4000	1200	1700	....	....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450	2400	4750	4400	1350	1900	2300(D)	....
P-6	2453, 2454 and 2458	6100	2550	5350	4950	1500	2100	....	....
P-7	2476 and 2477	6500	2800	5700	5450	1600	2250	....	....
P-8, 10	2461 to 2474, 2478 to 2483	6800	2850	5900	5550	....	....	....	....
P-8, 10	2475, 2484 to 2491	6800	3050	5900	5550	....	....	....	....
P-11	3100 to 3109	5250	2250	4550	4350	1300	1800	2100	....
P-12	3120 to 3129	6900	2900	6000	5750	....	....	....	....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	6600	2900	5750	5550	1700	2300	2650	....
C-15, 32	2500, 2505 to 2507	4250	1850	3700	3550	1100	1450	1700	1700
C-17	2510 and 2511	5200	2300	4550	4350	1350	1850	2150	....
C-18	3400 to 3409	6050	2650	5300	5100	1550	2150	2500	....
C-19	3410 to 3426	6300	2750	5550	5300	1650	2200	2600	....
TW-1	2900 to 2913	5050	2200	4400	4200	1300	1750	2050	....
TW-2, 3	2932 to 2952	4050	1750	3550	3400	1000	1400	1600	....
TW-4, 6	2926 to 2931 and 2957	3850	1650	3350	3200	960	1300	1550	1550
TW-8	2914 to 2923	5550	2450	4900	4650	1400	1950	2250	....
A-3	3029	3900	1550	3400	3050	850	1200	1500	....
A-3	3025, 3036, 3052 and 3057	3900	1650	3400	3050	910	1300	1550	....
A-6	3000 to 3003	4800	2100	4150	3750	1150	1650	1850	....
Mk-2, 4	3201 to 3240	7650	3350	6700	6400	1900	2650	3000(B)	....
Mk-5, 6	3241 to 3277	8450	3650	7350	7000	2150	2900	3400(B)	....
Mk-7, 8, 9	3300 to 3324	9200	4050	8050	7750	2400	3250	3750(C)	....
Mk-10	3295	7100	3100	6200	5950	1850	2500	2900(D)	....
Mk-11	3297 and 3298	6800	3000	5950	5700	1750	2411	2800(D)	....
F-1	3600 to 3652	9600	4200	8400	8050				
F-3	3653 to 3667	11000	4850	9650	9250				
F-4, 5	3668 to 3769	11000	5150	9650	9250				
AM-2	3900 to 3911	10900	4750	9550	9100				
MM-3	3930 and 3931	12800	5600	11200	10700				
AC-1, 2, 3	4000 to 4048	13300	5900	11650	11150				
AC-4, 5	4100 to 4125	17300	7650	15100	14500				
AC-6 to 12	3800 to 3811, 4126 to 4294	18300	8050	16000	15300				
Mt-1, 3, 4, 5	4300 to 4376	9000	4050	7850	7400				
Mt-2	4385 to 4390	9750	4200	8500	8150				
GS-1, 2	4400 to 4415	9600	4300	8400	7900				
GS-3, 4, 5, 6	4416 to 4469	10200	4400	8900	8500				
SP-1, 2, 3	5000 to 5048	12950	5700	11350	10850				
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6	6	6	6	3	3	3	3
	45 Ms to 55 Ms	3	3	3	3	3	3	3	3
	More than 55 Ms	0	0	0	0	0	0	0	0

NOTES:

(A) Engine 2371 not permitted on these branches.

(B) Applies to engines 3201, 3203 to 3206 inc., 3211, 3213, 3214, 3224, 3227, 3229, 3236, 3237, 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3272 and 3274 only between Napa Jct. and Larkmead, and Union and West Napa. Other Mk-2, 4, 5, 6 Class engines not permitted to operate beyond Napa River Bridge 45.62.

(C) Mk 7, 8, 9 Class engines not permitted to operate beyond Napa River Bridge 45.62.

(D) P-1, 3, 4, 5 and Mk-10, 11 Class engines not permitted to operate beyond Yountville, nor between Union and West Napa.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

MARTINEZ SUBDIVISION

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Napa Jct. to Schellville Napa Jct. to Vallejo San Ramon to Radum	Schellville to Napa Jct.	Vallejo to Napa Jct. Elmira to Winters	Winters to Elmira	Winters and Esparto	Radum to San Ramon	Avon to San Ramon	San Ramon to Avon
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	....	....	....	....	....	....	....	....
DES-100 to 107	1300 to 1395	....	....	....	....	....	....	....	....
E-23	1500 and 1502	4040	1350	1500	1720	....	1890	1230	4040
M-4	1617 to 1713	5300	1820	2040	2300	4950	2500	1680	5300
M-6, 8	1721 to 1803, 1823 to 1825	6200	2140	2400	2700	....	2970	2000	....
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	6550	2280	2550	2870	....	3100	2100	....
M-11	1832 to 1835	6820	2370	2660	2980	....	3250	2200	....
T-1	2242 to 2271	4500	1550	1750	1960	4300	2150	1430	4500
T-8, 9	2161, 2174 and 2178	3270	1100	1240	1390	3100	1540	1000	3270
T-23	2301 to 2310	6500	2250	2520	2830	....	3100	....	....
T-26	2283 to 2299	5730	1950	2200	2470	....	2720	....	....
T-28, 31	2311 to 2362	7170	2480	2790	3130	....	3430	....	....
T-32, 40	2363 to 2384	7300(A)	2530(A)	2830(A)	3180(A)	....	3500(A)	....	....
T-36	2103	4800	1680	1880	2110	4600	2300	1550	4800
T-37	2105 and 2106	6500	2250	2530	2840	....	3100	....	....
T-57, 58	2385 and 2386	5880	2040	2280	2560	....	2800	....	....
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	5900	1990	2240	2520	....	2780		
P-1	2400, 2403 to 2407 and 2415	6200	2090	....	....	....	2910	....	....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	6410	2180	2460	2770	....	3050	....	....
P-6	2453, 2454 and 2458	7300	2490	....	....	....	3460	....	....
P-7	2476 and 2477	7700	2660	....	....	....	3690	....	....
P-8, 10	2461 to 2474, 2478 to 2483	....	....	....	....	....	....	....	....
P-8, 10	2475, 2484 to 2491	....	....	....	....	....	....	....	....
P-11	3100 to 3109	6330	2150	....	....	....	3000	....	....
P-12	3120 to 3129	....	....	....	....	....	....	....	....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	7800	2720	3050	3420	7400	3750	2500	7800
C-15, 32	2500, 2505 to 2507	5050	1760	1970	2200	4750	2400	1600	5050
C-17	2510 and 2511	6200	2180	2440	2730	5870	3000	2020	6200
C-18	3400 to 3409	7230	2530	2830	3180	6850	3480	....	....
C-19	3410 to 3426	7530	2630	2950	3300	7100	3620	....	....
TW-1	2900 to 2913	6000	2100	2350	2630	5700	2880	....	....
TW-2, 3	2932 to 2952	4800	1670	1880	2100	4550	2310	....	....
TW-4, 6	2926 to 2931 and 2957	4600	1570	1770	1990	4350	2180	1450	4600
TW-8	2914 to 2923	6650	2310	2590	2900	6300	3180	....	....
A-3	3029	4700	1550	1750	1980	....	2180	....	....
A-3	3025, 3036, 3052 and 3057	4900	1620	1830	2070	....	2290	....	....
A-6	3000 to 3003	5700	1910	2150	2430	....	2670	....	....
Mk-2, 4	3201 to 3240	8800(B)	3050	3430(B)	3850(B)	....	4230(B)	....	....
Mk-5, 6	3241 to 3277	10000(B)	3470	3900(B)	4370(B)	....	4800(B)	....	....
Mk-7, 8, 9	3300 to 3324	10750(B)	3820	4180(B)	....	....	....	....	....
Mk-10	3295	8450	2960	3320	3700	....	4060	....	....
Mk-11	3297 and 3298	8100	2850	3190	3570	....	3900	....	....
F-1	3600 to 3652								
F-3	3653 to 3667								
F-4, 5	3668 to 3769								
AM-2	3900 to 3911								
MM-3	3930 and 3931								
AC-1, 2, 3	4000 to 4048								
AC-4, 5	4100 to 4125								
AC-6 to 12	3800 to 3811, 4126 to 4294								
Mt-1, 3, 4, 5	4300 to 4376								
Mt-2	4385 to 4390								
GS-1, 2	4400 to 4415								
GS-3, 4, 5, 6	4416 to 4469								
SP-1, 2, 3	5000 to 5048								
Allowance for Empty and Underloaded Cars	Less than 45 Ms								
	45 Ms to 55 Ms								
	More than 55 Ms								

NOTES:

(A) Engine 2371 not permitted on these branches.

(B) Mk-7, 8, 9 and Mk-2, 4, 5, 6 Class engines, except engines 3201, 3203 to 3206 inc. 3211, 3213, 3214, 3224, 3227, 3229, 3236, 3237, 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3272 and 3274 not permitted to operate between MP 33 and Vallejo, San Ramon and Asco, Elmira and Winters.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Fresno.......Trains on Pratton line.
Biola Jct......Trains on Biola line.

RULE 14 (e). As specified below, — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Tracy.......Trains on Los Banos line.
Kerman.....Trains on Biola line.
Ingle.......Trains on Riverdale line.

RULE 82 (A). Westward trains via Biola line will obtain train orders and check register at Muscatel instead of Fresno Yard.

RULE 83 (A). Only trains originating or terminating will register at Los Banos and Ingle.

Only extra trains will register at Kerman.

Only trains via Biola terminating, and trains via Pratton originating or terminating will register at Fresno Yard.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:

Kerman ....Extra trains
Muscatel ....Trains not required to stop for other reasons

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following points:

West MP			East MP
80.70	Tracy	(Martinez-Los Banos line)..............	85.64
69.19	"	(Niles-Lathrop line)..................	74.37
139.61	Los Banos		142.01
192.46	Kerman		194.53
	"	(Biola line)........................	194.65
206.04	Fresno	(Pratton-Selma line).................	210.81
208.44	"	(Biola-Exeter line)	208.15
199.07	"	(Merced-Clovis line)..................	209.60

Fresno. Trains or engines will not move against current of traffic on double track, except on authority of yardmaster. When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags installed, protecting crossings during movements, except where crossing watchman located.

Trains must receive proceed signal from yardman, green flag by day and green light by night, between Tulare St. (east of passenger station) and Merced St. (west of passenger station).

Westward trains via Pratton line must receive signal from yardman at Divisadero St., green flag by day and green light by night.

When Signal 2046 on Pratton line, or Signal 2042 on eastward track displays stop indication train must stop, and after proceed signal received from yardman, green flag by day and green light by night, may then proceed as prescribed by Rules 509 (F) and 513.

Eastward trains via Pratton line to Fresno Yard must receive proceed signal from yardman (green flag by day, green light by night) before fouling eastward or westward main track.

RULE 103 (A). House track at Newman must not be switched between Merced and Fresno Sts. from five minutes before arrival to five minutes after departure of passenger trains.

While switching over Fourth St., Los Banos, on back track and west middle, a member of crew must protect the crossing.

Public Utilities Commission orders require that trains and engines must stop, and member of crew must protect traffic on the following street or highway crossings before movement is made:

Vernalis ....Crossing on Associated Dehydrators spur.
West of Vanormer.Highway crossing on H & N Farms spur.
Cromir ....Crossing Shaw Ave. on team track.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Tracy...........Niles line, for Martinez line.
Tracy...........End double track, for eastward track.
Tracy...........Los Banos line, for Niles line.
Ingle...........Riverdale line, for siding.
Kerman ....Biola line, for Pratton line.
Fresno Yard ....End double track, for westward track.
Fresno ....Pratton line, for eastward main track.

RULE 105. Kerman. North siding is siding north of main track extending from MP 192.9 to MP 194.1, and to be used by trains to and from Biola line only; east switch to be lined normally for movement to and from Biola line. Westward trains from Biola line, unless otherwise required by train order, will use north siding. Eastward trains to Biola line will enter Biola line at junction switch, unless west switch of north siding is lined for siding, and proceed signal is received from operator (green flag by day, green light by night).

South siding is siding south of main track extending from MP 192.8 to MP 193.8, and to be used by trains to and from Pratton line only.

Los Banos. Normal position of switch diverging from west end siding will be for movement to tail track spur.

RULE 221. Fresno Yard is a train-order office for trains originating via Pratton line only.

RULE D-251. Will apply as follows:

On both main tracks..Between Fresno Yard and Calwa Tower.

RULE 505. AUTOMATIC BLOCK SYSTEM

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

Eastward movements governed by dwarf light signals 710, 712, 714.

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

Westward freight trains stopped by Signal 717, located east of overhead crossing east of Tracy, use telephone located on this signal, call switch tender at puzzle switch and be governed by his instructions.

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

RULE 516. Overlap posts:

Floyd (1500 feet east of west switch)......Eastward trains.

RULE 535. SPRING SWITCHES

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

Lyoth. WPRR crossing. Whistle signal:

To enter or leave storage track, o — o.

Biola Jct. Limits extend from signal 675 feet west of junction switch on Merced line and signal 575 feet west of junction switch on Biola line, to westward signal 930 feet east of junction switch on main track, and to dwarf signal at derail west end No. 1 drill track.

Junction switch, derail on Biola line 535 feet west of junction switch, and derail and switch at west end No. 1 drill track are dual control switches, operated from train-order office Fresno yard. Telephones in concrete battery house Biola Jct., and at derail on Biola line to communicate with signal operator when necessary. Instructions governing hand operation of dual control switches when authorized by signal operator are posted in telephone booths.

Signal governing movement from No. 1 drill track displays green aspect for movement to Merced line; yellow aspect for movement to Biola line.

GENERAL REGULATIONS

RULE 824. Tracy. Before engine is detached when train stops on yard track in Hill yard not less than three hand brakes must be set on cut west of C St., and four hand brakes must be set on east end of train.

Before engine is detached when train stops on yard track on Martinez side, not less than four hand brakes must be set on west end of train.

RULE 825. Cars must not be left within 250 feet of highway crossing at Floyd.

Train crews must not release brakes on outbound trains at Tracy until engine is coupled and brake pipe is charged.

RULE 827. TRAIN INSPECTION

Passenger trains making station stop at Los Banos must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes and entrain on station side.

RULE 829. Los Banos. City ordinance provides that highways or streets within city limits shall not be obstructed for longer than 10 mins.

SPEED RESTRICTIONS: Maximum speed of trains with engines of various classes is shown below. Trains with engines not listed must not exceed 35 MPH. Speed must be further restricted as required by speed boards, and may be exceeded only as authorized by special instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE ABSOLUTE SAFETY, REGARDLESS OF TIME.

TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
	PASSENGER							*FREIGHT AND MIXED							
	DEP P-7-8-10-12 A Mt GS	DEF E P-1-3-4-5-6-11	T-26-32-37-40 AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB) SP B (if CCB)	AM B (if not CCB)	DES 1 to 7 DES 100 to 107 C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB) AC-1-2-3	C-15-17-32 Mk-10-11 MM	With no Restricted Cars (see note)	With Restricted Cars (see note)	DEP DEF E P A Mt GS	DES 1 to 7 DES 100 to 107 T-26-32-37-40 Mk-5-6-7-8-9 F (if CCB) AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB) SP B	DES-200 C-15-17-32 TW Mk-2-4-10-11 AC-1-2-3 AM MM	DES DEP DEF E T P C TW A Mk F Mt GS SP B	M AC AM MM
COLUMN:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Between Tracy and Fresno, except	55	55	55	50	45	40	35	40	40	40	40	35	30	30	25
Tracy-MP 83.00	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
MP 83.00-MP 85.64 (Tracy yard limit), except	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
Over WPRR crossing, Lyoth	40	40	40	40	40	40	35	25	25	25	25	25	25	20	20
MP 139.61-MP 142.01 (Los Banos yard limits), except	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
Along or across street crossings, Los Banos	20	20	20	20	20	20	20	20	20	12	12	12	12	12	12
MP 206.04-Fresno, except	40	40	40	40	40	40	35	30	30	30	30	30	30	20	20
*Fresno, along or across street crossings	20	20	20	20	20	20	20	20	20	12	12	12	12	12	12
Between Kerman and Biola Jct., except	30	30	30	30	30	30	30	30	30	30	30	30	30	20	20
Through junction switches and crossover, Biola Jct	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20

*Regulated by city ordinance.

*Freight and mixed trains with an engine listed in columns 5, 6 or 7 must not exceed maximum speed permitted the same engine when handling passenger train.

(Note) RESTRICTED CARS: Twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed permitted with Certain Equipment"; scale test cars; and cars with arch-bar trucks.

DES 1 to 7 and DES 100 to 107 may make maximum of 40 MPH in territory where 30 MPH is authorized in Column 14.

MISCELLANEOUS

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Tracy—Brewery; Holly Sugar spur.
"	Patterson—Patterson Ranch spur.
"	Crows Landing—Yancey Lbr. spur.
"	Newman—Golden State Creamery spur; Lumber Co. spur.
"	Gustine—California Milk spur and Carnation Co. loading tracks.
"	Los Banos — Builders Lbr. spur; Union Oil spur; Golden State Creamery spur.
Mt-2, GS, F, SP, AM, MM, AC, and Eng. 2371	Los Banos—Wye.

Load limit (car and contents):

Tracy-Fresno ....240,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

LOCATIONS WHERE SPEED BOARD RESTRICTIONS APPLY TO ONE OR MORE CURVES, STRUCTURES, OR EXTENDED SECTION OF TRACK.

For Eastward Trains			For Westward Trains		
Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP	Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP
82.9	83.0	85.6	86.0	85.2	85.2
84.4	85.2	85.2	86.4	85.6	82.8
138.8	139.6	142.1	142.9	142.1	139.6
206.5	207.2	208.4			

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:	15
With engine backing	10

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description	
140.2	Los Banos	Warehouse opposite east leg of wye	Side

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Tracy and Fresno Kerman and Biola Jct.
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	3200
DES-100 to 107	1300 to 1395	4500
E-23	1500 and 1502	3350
M-4	1617 to 1713	4450
M-6, 8	1721 to 1803, 1823 to 1825	5250
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	5500
M-11	1832 to 1835	5700
T-1	2242 to 2271	3800
T-8, 9	2161, 2174 and 2178	2750
T-23	2301 to 2310	5500
T-26	2283 to 2299	4800
T-28, 31	2311 to 2362	6000
T-32, 40	2363 to 2384	6150
T-36	2103	4050
T-37	2105 and 2106	5450
T-57, 58	2385 and 2386	4950
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	4950
P-1	2400, 2403 to 2407 and 2415	4950
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450
P-6	2453, 2454 and 2458	6100
P-7	2476 and 2477	6500
P-8, 10	2461 to 2474, 2478 to 2483	6800
P-8, 10	2475, 2484 to 2491	6800
P-11	3100 to 3109	5250
P-12	3120 to 3129	6900
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	6600
C-15, 32	2500, 2505 to 2507	4250
C-17	2510 and 2511	5200
C-18	3400 to 3409	6050
C-19	3410 to 3426	6300
TW-1	2900 to 2913	5050
TW-2, 3	2932 to 2952	4050
TW-4, 6	2926 to 2931 and 2957	3850
TW-8	2914 to 2923	5550
A-3	3029	3900
A-3	3025, 3036, 3052 and 3057	3900
A-6	3000 to 3003	4800
Mk-2, 4	3201 to 3240	7650
Mk-5, 6	3241 to 3277	8450
Mk-7, 8, 9	3300 to 3324	9200
Mk-10	3295	7100
Mk-11	3297 and 3298	6800
F-1	3600 to 3652	9600
F-3	3653 to 3667	11000
F-4, 5	3668 to 3769	11000
AM-2	3900 to 3911	10900
MM-3	3930 and 3931	12800
AC-1, 2, 3	4000 to 4048	13300
AC-4, 5	4100 to 4125	17300
AC-6 to 12	3800 to 3811, 4126 to 4294	18300
Mt-1, 3, 4, 5	4300 to 4376	9000
Mt-2	4385 to 4390	9750
GS-1, 2	4400 to 4415	9600(A)
GS-3, 4, 5, 6	4416 to 4469	10200(A)
SP-1, 2, 3	5000 to 5048	12950
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6
	45 Ms to 55 Ms	3
	More than 55 Ms	0

(A) GS Class Engines not permitted to operate in passenger service.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 14 (e). As specified below, — — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Galt........Trains on Ione line.
Lodi........Trains on Valley Spring and Woodbridge lines.
Stockton...Trains on Oakdale line.
Lathrop....Trains on Merced line.
Tracy......Trains on Los Banos line.

RULE 14 (k). Will not apply in C.T.C. system.

RULE 82 (A). Westward regular trains from Lathrop Subdivision to Merced Subdivision will assume the corresponding number and schedule at Lathrop without clearance.

Westward sections and extra trains authorized at Stockton by train-order for movement on Merced Subdivision may leave Lathrop without clearance.

Trains from Merced Subdivision will assume the corresponding number and schedule on Lathrop Subdivision and may leave Lathrop without clearance.

Extra trains from Merced Subdivision for movement eastward on Lathrop Subdivision may leave Lathrop without clearance.

Trains using west leg of wye to Merced Subdivision must obtain clearance before leaving Lathrop.

Trains from Western Division at Brighton may assume corresponding schedules, or sections of schedules, on Sacramento Division without clearance.

Trains to Western Division at Brighton, originating at Sacramento, may leave Sacramento with Western Division clearance only.

Trains enroute Western Division via Sacramento or Brighton originating at Roseville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed Western Division. Train orders addressed to such trains at Roseville will apply the same as if addressed to them at Brighton or Sacramento.

Crews to operate as Nos. 420, 424 and 426, and sections thereof, on Western Division from Brighton, may assume such identity at Roseville instead of Brighton. Sacramento and Western Division clearance for sections of these schedules must bear the words "No signals" or "Green signals" as the case may be, and bear dispatcher's O.K., and train-order authority for display of signals will not be required Roseville to Brighton, nor on Lathrop Subdivision of Western Division. Crews will register and display indicators and signals accordingly.

RULE 83. Sections of first and third class schedules to Merced Subdivision having received their authority at Stockton, or east of Stockton, need not ascertain that preceding sections of the same schedule have left Lathrop. A leading section must not permit a following section to pass between Stockton train-order office and junction switch Lathrop except as provided by last paragraph of Rule 85.

Identification may be made by westward trains between Stockton and Lathrop to be applied at Lathrop on Merced Subdivision. Reduce speed sufficiently to permit identification and comply with Rule 14 (k).

RULE 83 (A). Extra trains will register at Stockton, Lathrop and Oakdale.

Trains originating or terminating on east leg of wye at Lathrop will not register at Lathrop.

Only trains originating or terminating, other than third-class and extra trains passing Sacramento to or from Western Division will register at Sacramento.

Only eastward trains via Brighton, and trains originating or terminating, will register at Sacramento, 12th St.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:

Lathrop	All trains on Lathrop Subdivision and Merced Subdivision trains originating or terminating using west leg of wye.
Stockton	Third-class and extra trains, except those originating or terminating.
Sacramento, 12th St...	Eastward trains via Brighton.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, except within C.T.C. limits, are established at the following points:

West MP			East MP
80.70	Tracy	(Martinez-Los Banos line)...............	85.64
69.19	"	(Niles-Lathrop line).....................	74.37
80.56	Lathrop	(Tracy-Stockton line)..................	83.04
	"	(Merced line)	94.02
85.07	Stockton		93.72
	"	(Oakdale line)........................	94.41
120.23	Oakdale..............................		122.92
101.57	Lodi		104.25
	"	(Victor line)	104.45
	"	(Woodbridge line).....................	End track
111.10	Galt		113.21
	"	(Ione line)	112.91
85.51	Sacramento...........................		95.35
131.60	"	(Stockton line).......................	136.33
129.04	Valley Spring.........................		130.50
141.94	Kentucky House........................		End track
138.28	Ione		End track

RULE 95. Train orders issued by Western Division under Form F, reading to or from Brighton, will apply over the Sacramento Division into or out of Sacramento or Roseville.

Nos. 421, 423 and 425 and sections of those schedules from Western Division at Brighton may continue display of indicators through to Roseville, and register at Roseville accordingly.

RULE D-97 (A). Will apply between Tracy and Stockton Tower No 4.

RULE 98. Railroad crossings at grade not interlocked:

Trains and engines must approach with caution, and may move over the following crossings without stopping, if crossing clear and no movement approaching on intersecting line:

Stockton......CCTCo., crossing of Oakdale Branch near MP 92.0.
Lodi ....CCTCo., crossing of Brighton line at MP 103.2.
Lodi ....CCTCo., crossing of Woodbridge line.

Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

Lodi ....CCTCo., crossing of yard tracks west of station building.
Roma..........CCTCo., crossing of Valley Spring line.
Oakdale........AT&SFRy, crossing of Oakdale Branch.
MP 116.7 on Ione Branch..CCTCo., crossing of Ione Branch.

Drawbridge not interlocked:

Stockton. Drawbridge over San Joaquin River, on spur connecting with SPBRy. Drawbridge normally open for river traffic. SP movement must stop. Sound whistle signal 14 (j) for bridge to be lined.

RULE 103 (A). Stockton. When making movements eastward on Scotts Avenue, before crossing El Dorado Street, following will govern:

With engine ahead pulling cars, stop and proceed.

With cars being pushed, stop and proceed with yardman protecting movement over El Dorado Street.

Public Utilities Commission orders require that trains and engines must stop, and member of crew must protect traffic on the following street or highway crossings before movement is made:

Tomspur .....Crossing on Hershel Canning Co. spur.
Woodbridge ..Crossing Woodbridge road on General Mills spur.
Carbondale ..Crossing county road when on industry track.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Tracy......Niles line, for Martinez line.
Tracy......End double track, for eastward track.
Tracy......Los Banos line, for Niles line.
Lodi.......Woodbridge line, for Lathrop line.
Lodi.......Valley Spring line, for yard track.
Galt.......West leg of wye for Ione line.
Galt.......East leg of wye for straight leg of wye.

RULE 105. Lathrop. Westward siding leaves westward main track 1500 feet east of corral and enters main track just east of water tank.

RULE 204. Trains of Lathrop or Merced Subdivision, with the same conductor and engineer operating through Lathrop may be issued train orders on one subdivision that affect their movement on the other, or both subdivisions.

RULE 204 (A). Operator Stockton must furnish engineers of eastward freight trains an extra copy of Sacramento Division train orders, to be delivered to helper engineer when helper is picked up.

RULE 221. Trains must obtain clearance before leaving Stockton.

Light will not be displayed in train-order signals on Oakdale and Lodi Branches, except when train-order operator is on duty.

RULE D-251. Will apply as follows:
On eastward track, Lathrop to Stockton Tower No. 4.
On westward track: Stockton Tower No. 4 to Stockton;
Lathrop to Tracy.

RULE 505. AUTOMATIC BLOCK SYSTEM

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

Eastward movements governed by dwarf light signals 710, 712, 714.

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

Westward freight trains stopped by Signal 717, located east of overhead crossing east of Tracy, use telephone located on this signal, call switch tender at puzzle switch and be governed by his instructions.

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

Lathrop. Trains and engines stopped by Signal 828 may apply Rule 509 only after obtaining permission of train-order operator.

RULE 510. Following block signals equipped with a triangular number plate displaying the letter "P" have included in their control limits some special protective device:

Eastward Signals		Westward Signals
	Collision detector, highway underpass, MP 104.16 (Lodi)........................	P-1043

RULE 535. SPRING SWITCHES

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

San Joaquin River Drawbridge. Derails in eastward main track 892 feet west of lift span, and in westward main track 1208 feet east of lift span. Signal operator on duty 8:00 AM to 12:00 Noon, and 1:00 PM to 5:00 PM. During other hours signals and derails lined for trains.

Lathrop. East zone. Limits extend from SA signal 575 feet west of west switch of crossover to SA signal 65 feet east of east switch of crossover.

West zone. Limits extend from 360 feet west of junction switch to 340 feet east of junction switch.

South zone. Limits extend from 225 feet west of junction switch to 65 feet east of junction switch.

W. P. zone. Limits extend between semi-automatic signals either side of WPRR crossing.

Telephones at interlocking signals governing entrance to East, West and South zones, and in door of concrete shelter at WPRR crossing.

French Camp Tower — TSRy crossing 1.6 miles east of French Camp. Signal operator on duty 6:00 PM to 3:00 AM daily except Sundays and holidays. Signals will be left in proceed position and switch and derail to stock yard spur will be left for normal handling by trainmen when signal operator not on duty. During hours signal operator on duty, this switch will be electrically locked and controlled by signal operator.

Trains entering this track must restore switch and derail and lock same. Before leaving this track, permission must be obtained from signal operator, when on duty, and will be given in accordance with Rule 628; Whistle signal, — — — o may be used.

Engineers will sound whistle signal 14 (m) when they wish to enter or pass through this plant when signal operator on duty.

Stockton Tower No. 2 — AT&SFRy crossing, Sacramento and Taylor Streets, Stockton. Sound whistle signals as follows for:
Westward main track, o o — —.
Eastward main track, — o —.
Middle track, o — —.
Old siding, — — o o.
Gauns track, o — o.
Houser-Haines track, o o — o.

One short sound of tower siren (o) will be signal for all train movements to stop.

Two short sounds repeated several times (oo oo oo) will be signal for yard and train crews to clear the plant at once.

Stockton Tower No. 3 — WPRR crossing Weber Avenue and Union St., Stockton.

Stockton Tower No. 4. WPRR crossing MP 92.3. Limits on eastward main track extend from signal 660 feet west of crossing to absolute signal at beginning of C.T.C. 900 feet east of crossing; and on westward main track from signal at end of C.T.C. 900 feet east of crossing to dwarf signal 200 feet west of crossing.

Switches and derails on Gulf Red Cedar spur and Gilmore Oil spur are hand-throw and equipped with electric lock controlled by signal operator.

Whistle signal:
For crossover, — o —.

Polk. West switch and eastward signals operated by signal operator at Elvas, and their use governed by Sacramento Division special instructions.

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM

Limits extend from east limit of Stockton Tower No. 4 at east crossover, to interlocking signal just west of west switch at Polk eastward and from absolute signal just east of west switch Polk to east interlocking limit at Stockton Tower No. 4 westward.

On double track between end of double track east of Akers and east interlocking limits at Stockton Tower No. 4 movements may be made in either direction on either track being governed by absolute and automatic signals. Rule 509 applicable to single track will apply on both tracks.

RULE 762. Flag protection to rear, as prescribed by Rule 99, is required by eastward trains standing, or delayed, on main track with rear of train between Signal 1122 and east switch Galt; and by westward trains standing, or delayed, on main track with rear of train between Signal 1121 and west switch.

GENERAL REGULATIONS

RULE 824. Tracy. Before engine is detached when train stops on yard track in Hill yard not less than three hand brakes must be set on cut west of C St., and four hand brakes must be set on east end of train.

Before engine is detached when train stops on yard track on Martinez side, not less than four hand brakes must be set on west end of train.

RULE 825. Train crews must not release brakes on outbound trains at Tracy until engine is coupled and brake pipe charged.

AIR BRAKE RULES

RULE 17. Retainers must be used on freight and mixed trains on descending grades as follows:
Toyon to ½ mile east of
Valley Spring.......1 valve for every 150 Ms in train.
Norval to Helisma.....1 valve for every 150 Ms in train.

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:
Toyon......All trains.

PASSENGER TRAINS

RULE 39. Running test must be made as follows:
Eastward trains on Lathrop Subdivision, leaving Tracy, Lathrop and Stockton.
Westward trains, leaving Akers, Stockton and Lathrop.

MISCELLANEOUS

1. Engines of Sierra Ry. will take water from SP supply at Oakdale, using SP main track. Trains and engines must move with caution between F and G Sts, Oakdale, expecting to find main track occupied.

Emergency water supply only at Lathrop on westward track.

6. Cars must not be left on straight leg of wye, Lathrop, to block tool house or crossover.

Engines will be turned on AT&SFRy wye at Oakdale, operating over Sierra Ry. main track from Oakdale to AT&SFRy junction, being governed by current Sierra Ry. timetable (copy may be secured from SP agent), and will procure clearance from Sierra Ry. operator when on duty, before leaving Oakdale; and be governed by Special Rule No. 3, Sierra Ry. timetable reading as follows:

> "All trains will approach yard limits of stations shown with train under full control, expecting to find main track obstructed. This does not give switching engines right over any train."

Sierra Ry. switch key in phone box at SP station building, must be replaced after use. Every precaution for safety must be observed, flagging if conditions require.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Tracy—Brewery; Holly Sugar spur.
Mt-2, GS, F, SP, AM, MM, AC, and Eng. 2371	Lathrop—Tracks leading to Lend-Lease.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Lathrop—Fresno No. 2 track; beet track; slop track.
"	Stockton—Tracks 2 and 3 (except to pick up or set out); west end of tracks 2, 3 and 4 in classification yard.
GS, F, SP, AM, MM, AC	Stockton—Turntable lead.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Lodi—Tracks 5 and 6; crossover between tracks 3 and 5; west end of track 5 to Walnut St.
Mt-2, GS, F, SP, AM, MM, AC, and Eng. 2371	Lodi—Wye (no restriction on west end of wye between siding and oil column).
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Urgon—Spur.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Galt — Crossover between controlled siding and oil track; wye.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Elk Grove — Elk Grove Winery spur.
"	Florin—Florin Fruit Growers spur.
Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Polk—Tracks 1 and 2, U. S. Army Signal Depot.

Load limit (car and contents):

Tracy-Brighton	240,000 pounds
Stockton-Montpellier	210,000 pounds
Woodbridge-Kentucky House	210,000 pounds
Galt-Edwin	210,000 pounds
Edwin-Ione	169,000 pounds

When false bents are in place on bridges 135.87 and 136.64 load limit between Edwin and Ione will be 210,000 pounds.

Unless authorized by Superintendent, heavier loads must not be handled.

15. Trains must not pass switchtenders' stations at Sixth and Seventh Streets, Sacramento, without receiving signal from switchtender to proceed (green flag by day and green light by night) and must move with caution between Sacramento River bridge and Seventh Street.

LOCATIONS WHERE SPEED BOARD RESTRICTIONS APPLY TO ONE OR MORE CURVES, STRUCTURES, OR EXTENDED SECTION OF TRACK.

For Eastward Trains			For Westward Trains		
Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP	Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP
75.8	76.5	76.6	72.5	71.8	71.4
77.5	78.3	78.4	77.5	76.6	76.5
87.0	87.7	88.7	79.0	78.4	78.3
88.3	88.7	92.0	88.3	87.7	81.5
91.6	92.3	95.0	89.0	88.7	87.7
101.2	102.0	104.0	92.8	92.0	88.7
103.7	104.4	104.5	93.0	92.3	92.0
118.3	119.1	119.2	105.2	104.5	104.4
130.9	131.7	133.2	104.7	104.0	102.0
			120.6	119.2	119.1

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description	
90.7	Stockton	Water column, westward track	Side
104.3	Lodi	Mokelumne River bridge	Side
129.0	Florin	Water tank spout	Side
110.7	Lockeford	Brick platform at Locke warehouse	Side
132.2	Carbondale	Clay shed	Side
136.7	Dagon	Sutter Creek bridge	Overhead and side

SPEED RESTRICTIONS: Maximum speed of trains with engines of various classes is shown below. Trains with engines not listed must not exceed 35 MPH. Speed must be further restricted as required by speed boards, and may be exceeded only as authorized by special instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE ABSOLUTE SAFETY, REGARDLESS OF TIME.

TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
	PASSENGER							*FREIGHT AND MIXED							
	DEP P-7-8-10-12 A Mt GS	DEF E P-1-3-4-5-6-11	T-26-32-37-40 AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB) SP B (if CCB)	AM B (if not CCB)	DES 1 to 7 DES 100 to 107 C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB) AC-1-2-3	C-15-17-32 Mk-10-11 MM	With no Restricted Cars (see note)	With Restricted Cars (see note)	DEP DEF E P A Mt GS	DES 1 to 7 DES 100 to 107 T-26-32-37-40 Mk-5-6-7-8-9 F (if CCB) AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB) SP B	DES-200 C-15-17-32 TW Mk-2-4-10-11 AC-1-2-3 AM MM	DES DEP DEF E T P C TW	A Mk F Mt GS SP B	M AC AM MM
COLUMN:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Between Tracy and Lathrop, except	60	60	60	50	45	40	35	45	40	45	40	35	30	30	25
Tracy-End double track	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
End double track-Overpass east of puzzle switch	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
Over San Joaquin River drawbridge 78.30	40	40	40	40	40	40	35	40	40	40	40	35	30	20	20
Through switches, West Zone, Lathrop	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Between Lathrop and Brighton, except	65	65	60	50	45	40	35	35	35	35	35	35	30	30	25
Lathrop-MP 87.70 (French Camp Tower), except	55	55	55	50	45	40	35	40	40	40	40	35	30	30	25
Through switches, East Zone, Lathrop	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
MP 87.70-MP 92.30 (Stockton Tower No. 4), except	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
*MP 88.70-MP 92.00 (Stockton city limits)	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
MP 92.30-MP 95.00 (end double track)	55	55	55	50	45	40	35	35	35	35	35	35	30	30	25
Through turnout, MP 95.00 (end double track)	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20
MP 102.00-MP 104.00 (Lodi)	30	30	30	30	30	30	30	30	30	30	30	30	30	30	25
Over bridge 104.38 with GS, F, AC, Mt-2 class engines	25	......	25	25	......	25	......	25	25	25	25	25	25	25	25
Over bridge 119.14 with GS, F, AC, Mt-2 class engines	25	......	25	25	......	25	......	25	25	25	25	25	25	25	25
MP 131.70-Brighton	40	40	40	40	40	40	35	35	35	35	35	35	30	30	25

*Regulated by city ordinance.

Nos. 51 and 52 handling streamlined equipment with P-7-8-10-12 or Mt class engine with electro-pneumatic brakes functioning on engine and all cars, may run not to exceed 65 MPH in territory where maximum speed of 60 MPH is authorized in Speed Restrictions table.

*Freight and mixed trains with an engine listed in columns 5, 6 or 7 must not exceed maximum speed permitted the same engine when handling passenger train.

(Note) RESTRICTED CARS: Twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed permitted with Certain Equipment"; scale test cars; and cars with arch-bar trucks.

DES 1 to 7 and DES 100 to 107 may make maximum of 40 MPH in territory where 30 MPH is authorized in Column 14.

TERRITORY	PASSENGER	FREIGHT AND MIXED	LIGHT ENGINE RUNNING FORWARD	ENGINE BACKING WITH TRAIN OR LIGHT
Between Galt and Ione, except	30	30	20	20
MP 125.50-MP 127.10	25	25	15	15
Over Dry Creek bridge 135.87	15	15	15	15
Over Sutter Creek bridge 136.64	15	15	15	15
Between Stockton and Montpellier, except	30	30	20	20
Between Sacramento St. and Wilson Way, Stockton	8	8	8	8
Between switches, Peters	10	10	10	10
Between Lodi and Woodbridge	10	10	10	10
Between Lodi and Kentucky House, except	25	25	15	15
MP 121.40-MP 132.30	20	20	15	15
MP 132.30-MP 139.70	15	15	15	15
MP 139.70-Kentucky House	20	20	15	15

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:	15
★On all yard tracks within city limits, Stockton	8
Through controlled sidings in C.T.C., except:	25
With DES class engine backing light	15
With other engines backing	10
Through any siding, crossover, turnout or slip-switch with engine backing	10

★Regulated by city ordinance.

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Tracy and Brighton	Stockton and Montpellier	Lodi to Wallace Toyon to Macnider	Wallace to Toyon Macnider to Kentucky House	Macnider to Toyon	Valley Spring to Norval	Kentucky House to Macnider Toyon to Valley Spring Norval to Lodi	Lodi and Woodbridge
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	3200	....	....	....	....	....	....	....
DES-100 to 107	1300 to 1395	4500	....	....	....	....	....	....	....
E-23	1500 and 1502	3350	2300	2600	560	1050	1650	3350	3740
M-4	1617 to 1713	4450	3050	3450	800	1450	2200	4450	5000
M-6, 8	1721 to 1803, 1823 to 1825	5250	3600	4050	910	1600	2600	5250	5850
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	5500	3800	4250	970	1700	2750	5500	6200
M-11	1832 to 1835	5700	3950	4450	1050	1900	2900	5750	6450
T-1	2242 to 2271	3800	2600	2950	680	1200	1900	3800	4200
T-8, 9	2161, 2174 and 2178	2750	1850	2100	460	860	1350	2750	3270
T-23	2301 to 2310	5500	3750	4250	1000	1750	2750	5500	6150
T-26	2283 to 2299	4800	3300	3750	850	1550	2400	4850	5400
T-28, 31	2311 to 2362	6000	4150	4650	1050	1850	2950	6000	6800
T-32, 40	2363 to 2384	6150	4200(A)	4650(A)	1050(A)	1850(A)	2950(A)	6150(A)	6900(A)
T-36	2103	4050	2800	3150	760	1350	2050	4050	4550
T-37	2105 and 2106	5450	3750	4250	1000	1800	2750	5500	6100
T-57, 58	2385 and 2386	4950	3400	3850	910	1600	2500	4950	5480
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	4950	3350	3850	850(D)	1550	2450	4950(D)	....
P-1	2400, 2403 to 2407 and 2415	4950	....	....	....	....	....	....	....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450	4000	4200	930(D)	1700	2700	5450(D)	....
P-6	2453, 2454 and 2458	6100	....	....	....	....	....	....	....
P-7	2476 and 2477	6500	....	....	....	....	....	....	....
P-8, 10	2461 to 2474, 2478 to 2483	6800	....	....	....	....	....	....	....
P-8, 10	2475, 2484 to 2491	6800	....	....	....	....	....	....	....
P-11	3100 to 3109	5250	....	....	....	....	....	....	....
P-12	3120 to 3129	6900	....	....	....	....	....	....	....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	6600	4550	5150	1250	2200	3350	6600	7400
C-15, 32	2500, 2505 to 2507	4250	2900	3300	800	1400	2150	4250	4750
C-17	2510 and 2511	5200	3600	4050	1000	1750	2650	5250	5870
C-18	3400 to 3409	6050	4200	4750	1150	2000	3100	6100	6850
C-19	3410 to 3426	6300	4350	4950	1200	2100	3200	6350	7100
TW-1	2900 to 2913	5050	3450	3950	950	1650	2550	5100	5700
TW-2, 3	2932 to 2952	4050	2800	3150	740	1300	2050	4100	4600
TW-4, 6	2926 to 2931 and 2957	3850	2650	3000	690	1250	1900	3850	4350
TW-8	2914 to 2923	5550	3850	4350	1050	1850	2800	5600	6300
A-3	3029	3900	2650	3000	630(D)	1200	1900	3950(D)	....
A-3	3025, 3036, 3052 and 3057	3900	2900	3150	660(D)	1250	2000	4150(D)	....
A-6	3000 to 3003	4800	3550	3700	800(D)	1500	2350	4800(D)	....
Mk-2, 4	3201 to 3240	7650	5100(B)	5800(B)	1350(B)	2550(B)	3800(B)	7500(B)	8400(B)
Mk-5, 6	3241 to 3277	8450	5800(C)	6600(C)	1550(C)	2850(C)	4300(C)	8400(C)	9450(C)
Mk-7, 8, 9	3300 to 3324	9200						....	....
Mk-10	3295	7100	4900	5600	1350	2430	3650	7100	8000
Mk-11	3297 and 3298	6800	4700	5350	1300	2350	3500	6800	7650
F-1	3600 to 3652	9600	....	....	....				
F-3	3653 to 3667	11000	....	....	....				
F-4, 5	3668 to 3769	11000	....	....	....				
AM-2	3900 to 3911	10900	....	....	....				
MM-3	3930 and 3931	12800	....	....	....				
AC-1, 2, 3	4000 to 4048	13300	....	....	....				
AC-4, 5	4100 to 4125	17300	....	....	....				
AC-6 to 12	3800 to 3811, 4126 to 4294	18300	....	....	....				
Mt-1, 3, 4, 5	4300 to 4376	9000	....	....	....				
Mt-2	4385 to 4390	9750	....	....	....				
GS-1, 2	4400 to 4415	9600(E)	....	....	....				
GS-3, 4, 5, 6	4416 to 4469	10200(E)	....	....	....				
SP-1, 2, 3	5000 to 5048	12950	....	....	....				
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6	6						
	45 Ms to 55 Ms	3	3						
	More than 55 Ms	0	0						

NOTES:

(A) Engine 2371 not permitted on these branches.

(B) Applies to Engines 3201, 3203 to 3206, 3211, 3213, 3214, 3224, 3227, 3229, 3236 and 3237 only.

(C) Applies to Engines 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3272 and 3274 only.

(D) P-1, 3, 4, 5 and A-3, 6 Class Engines not permitted to operate between Macnider and Kentucky House.

(E) GS class engines not permitted in passenger service.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

LATHROP AND MERCED SUBDIVISIONS

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Galt to Edwin*	Edwin to Ione*	Ione to Edwin*	Edwin to Galt*	Lathrop and Fresno	Chowchilla and Dairyland	Berenda to Daulton	Daulton to Berenda
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	....	....	....	....	3200	....	....	....
DES-100 to 107	1300 to 1395	....	....	....	....	4500	....	....	....
E-23	1500 and 1502	1190	1190	4040	4040	3350	3990	1500	4040
M-4	1617 to 1713	1620	1620	5300	5300	4450	5250	2040	5300
M-6, 8	1721 to 1803, 1823 to 1825	1900	....	....	6200	5250	6100	2400	6200
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	2040	....	....	6550	5500	6450	2550	6550
M-11	1832 to 1835	2120	....	....	6820	5700	6750(D)	2650	6820
T-1	2242 to 2271	1384	1384	4500	4500	3800	4450	1750	4500
T-8, 9	2161, 2174 and 2178	970	970	3270	3270	2750	3220	1240	3270
T-23	2301 to 2310	2000	....	....	6500	5500	6450(D)	2520	6500
T-26	2283 to 2299	1740	....	....	5730	4800	5650(D)	2200	5730
T-28, 31	2311 to 2362	2220	....	....	7170	6000	7100(D)	2790	7170
T-32, 40	2363 to 2384	2260(A)	....	....	7300(A)	6150	7200(A)(D)	2830(A)	7300(A
T-36	2103	1500	1500	4800	4800	4050	4750	1880	4800
T-37	2105 and 2106	2000	....	....	6500	5450	6450(D)	2530	6500
T-57, 58	2385 and 2386	1820	....	....	5880	4950	5800(D)	2280	5880
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	....	....	....	....	4950	5850	....	....
P-1	2400, 2403 to 2407 and 2415	....	....	....	....	4950		....	....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	....	....	....	....	5450	6400	....	....
P-6	2453, 2454 and 2458	....	....	....	....	6100		....	....
P-7	2476 and 2477	....	....	....	....	6500		....	....
P-8, 10	2461 to 2474, 2478 to 2483	....	....	....	....	6800		....	....
P-8, 10	2475, 2484 to 2491	....	....	....	....	6800		....	....
P-11	3100 to 3109	....	....	....	....	5250		....	....
P-12	3120 to 3129	....	....	....	....	6900		....	....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	2430	....	....	7800	6600	7750	3050	7800
C-15, 32	2500, 2505 to 2507	1570	1570	5050	5050	4250	5000	1970	5050
C-17	2510 and 2511	1950	....	....	6200	5200	6150	2440	6200
C-18	3400 to 3409	2270	....	....	7230	6050	7180	2830	7230
C-19	3410 to 3426	2360	....	....	7530	6300	7480	2950	7530
TW-1	2900 to 2913	1870	....	....	6000	5050	5950	2350	6000
TW-2, 3	2932 to 2952	1500	....	....	4800	4050	4750	1880	4800
TW-4, 6	2926 to 2931 and 2957	1400	1400	4600	4600	3850	4550	1770	4600
TW-8	2914 to 2923	2060	....	....	6650	5550	6600	2590	6650
A-3	3029	....	....	....	....	3900	4600(D)	....	....
A-3	3025, 3036, 3052 and 3057	....	....	....	....	3900	4600(D)	....	....
A-6	3000 to 3003	....	....	....	....	4800	5650(D)	....	....
Mk-2, 4	3201 to 3240	2720(B)	....	....	8800(B)	7650	8800(B)(D)	3430(B)	8800(B
Mk-5, 6	3241 to 3277	3100(C)	....	....	10000(C)	8450	9900(C)(D)	3900(C)	10000(C
Mk-7, 8, 9	3300 to 3324	....	....	....	....	9200		....	....
Mk-10	3295	2650	....	....	8450	7100	8350(D)	3320	8450
Mk-11	3297 and 3298	2550	....	....	8100	6800	8000(D)	3190	8100
F-1	3600 to 3652					9600			
F-3	3653 to 3667					11000			
F-4, 5	3668 to 3769					11000			
AM-2	3900 to 3911					10900			
MM-3	3930 and 3931					12800			
AC-1, 2, 3	4000 to 4048					13300			
AC-4, 5	4100 to 4125					17300			
AC-6 to 12	3800 to 3811, 4126 to 4294					18300			
Mt-1, 3, 4, 5	4300 to 4376					9000			
Mt-2	4385 to 4390					9750			
GS-1, 2	4400 to 4415					9600(E)			
GS-3, 4, 5, 6	4416 to 4469					10200(E)			
SP-1, 2, 3	5000 to 5048					12950			
Allowance for Empty and Underloaded Cars	Less than 45 Ms					6			
	45 Ms to 55 Ms					3			
	More than 55 Ms					0			

***Ratings between Galt and Edwi also apply between Edwin a Ione when false bents are place on bridges 135.87 and 13**

NOTES:

(A) Engine 2371 not permitte on these branches.

(B) Applies to Engines 3201, 3 to 3206, 3211, 3213, 3214, 3 3227, 3229, 3236, and 3237 onl

(C) Applies to Engines 3241, 3 3251, 3253, 3255, 3259, 3266, 3 3271, 3272 and 3274 only.

(D) Not permitted between A and Dairyland.

(E) GS Class Engines not permitte in passenger service.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Fresno . . . . . .Trains on Pratton line.
Biola Jct. . . . .Trains on Biola line.

RULE 14 (e). As specified below, — — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Lathrop . . . . . .Trains on Merced line.
Berenda . . . . . .Trains on Daulton line.

RULE 82 (A). Westward regular trains from Lathrop Subdivision to Merced Subdivision will assume the corresponding number and schedule at Lathrop without clearance.

Westward sections and extra trains authorized at Stockton by train-order for movement on Merced Subdivision may leave Lathrop without clearance.

Trains from Merced Subdivision will assume the corresponding number and schedule on Lathrop Subdivision and may leave Lathrop without clearance.

Extra trains from Merced Subdivision for movement eastward on Lathrop Subdivision may leave Lathrop without clearance.

Trains using west leg of wye to Merced Subdivision must obtain clearance before leaving Lathrop.

First-class trains and trains originating or terminating at Fresno need not obtain clearance or check register at Muscatel.

Westward trains originating at Fresno Yard will obtain train orders and check register at Muscatel instead of Fresno Yard.

RULE 83. Sections of first and third class schedules to Merced Subdivision having received their authority at Stockton, or east of Stockton, need not ascertain that preceding sections of the same schedule have left Lathrop. A leading section must not permit a following section to pass between Stockton train-order office and junction switch Lathrop except as provided by last paragraph of Rule 85.

Identification may be made by westward trains between Stockton and Lathrop to be applied at Lathrop on Merced Subdivision; and by westward trains between Fresno and Fresno Yard to be applied at end of double track Fresno Yard. Reduce speed sufficiently to permit identification and comply with Rule 14 (k).

RULE 83 (A). Only trains originating or terminating will register at Modesto and Merced.

Only trains terminating will register at Fresno Yard.

Trains originating or terminating on east leg of wye at Lathrop will not register at Lathrop.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:

Lathrop . . . . . .All trains on Lathrop Subdivision and Merced Subdivision trains originating or terminating using west leg of wye.
Muscatel . . . . .Trains not required to stop for other reasons.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following points:

West MP		East MP
80.56	Lathrop (Tracy-Stockton line)	83.04
	" (Merced line)	94.02
109.94	Modesto	114.93
124.98	Turlock	127.32
149.55	Merced	151.42
182.67	Madera	185.38
206.04	Fresno (Pratton-Selma line)	210.81
208.44	" (Biola-Exeter line)	208.15
199.07	" (Merced-Clovis line)	209.60

Fresno. Trains or engines will not move against current of traffic on double track, except on authority of yardmaster. When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags installed, protecting crossings during movement, except where crossing watchman located.

Trains must receive proceed signal from yardman (green flag by day and green light by night) between Tulare St. (east of passenger station) and Merced St. (west of passenger station).

When Signal 2046 on Pratton line, or Signal 2042 on eastward track displays stop indication train must stop, and after proceed signal received from yardman (green flag by day and green light by night) may then proceed as prescribed by Rules 509 (F) and 513.

RULE 103 (A). Turlock. Switching must not be done over Main and Olive Street crossings between hours of 12 noon and 1.00 PM.

Public Utilities Commission orders require that trains and engines must stop, and member of crew must protect traffic on the following street or highway crossings before movement is made:

Chowchilla. . . .Highway crossing on Cardwell Co. spur.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Berenda . . . . . .Daulton line, for house track.
Chowchilla. . . .Dairyland line, for house track.
Fresno Yard . .End double track, for westward track.
Fresno . . . . .Pratton line, for eastward main track.

RULE 105. Modesto. Eastward siding leaves main track 1740 feet east of MP 110 and enters main track 1800 feet east of MP 111. Westward siding leaves main track 3432 feet east of MP 113 and enters main track 2112 feet east of MP 112.

RULE 204. Trains of Lathrop or Merced Subdivision, with the same conductor and engineer operating through Lathrop may be issued train orders on one subdivision that affect their movement on the other, or both subdivisions.

RULE 221. Muscatel is train-order office for trains originating only.

Trains must obtain clearance before leaving Kismet Tower.

RULE D-251. Will apply as follows:

On both main tracks. . Between Fresno Yard and Calwa Tower.

RULE 505. AUTOMATIC BLOCK SYSTEM

Lathrop. Trains and engines stopped by Signal 828 may apply Rule 509 only after obtaining permission of train-order operator.

RULE 516. Overlap posts:

Manteca (2300 ft. east of west switch) . . . . . .Eastward trains.

RULE 605. INTERLOCKING

Lathrop. East zone. Limits extend from 575 feet west of west switch of crossover to 65 feet east of east switch of crossover.

West zone. Limits extend from 360 feet west of junction switch to 340 feet east of junction switch.

South zone. Limits extend from 225 feet west of junction switch to 65 feet east of junction switch.

W. P. zone. Limits extend between semi-automatic signals either side of WPRR crossing.

Telephones at interlocking signals governing entrance to East, West, and South zones, and in door of concrete shelter at WPRR crossing.

Modesto Tower. TSRy crossing, MP 114.7. Signal operator on duty 9:00 AM to 12:00 noon, and 1:00 PM to 6:00 PM, daily except Sunday and holidays. During other hours signals and derails lined for SP movement. Instructions governing operation of interlocking posted in tower.

Kismet Tower. AT&SFRy crossing.

Biola Jct. Limits extend from signal 675 feet west of junction switch on Merced line and signal 575 feet west of junction switch on Biola line, to westward signal 930 feet east of junction switch on main track, and to dwarf signal at derail west end No. 1 drill track.

Junction switch, derail on Biola line 535 feet west of junction switch, and derail and switch at west end No. 1 drill track are dual control switches, operated from train-order office Fresno Yard. Telephones in concrete battery house Biola Jct., and at derail on Biola line to communicate with signal operator when necessary. Instructions governing hand operation of dual control switches when authorized by signal operator are posted in telephone booths.

Signal governing movement from No. 1 drill track displays green aspect for movement to Merced line; yellow aspect for movement to Biola line.

GENERAL REGULATIONS

RULE 827. TRAIN INSPECTION

Passenger trains making station stop at Modesto must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes and entrain on station side.

RULE 829. Turlock. City ordinance requires that highways or streets within city limits shall not be obstructed for longer than 10 minutes and that in event of fire alarm being sounded any train blocking Main St. must clear crossing immediately.

MISCELLANEOUS

1. When stopping to take water at Modesto, eastward freight trains leave train clear of L St. (second street west of passenger station), and westward trains clear of G St. (third street east of passenger station).

When stopping to take water at Merced, westward freight trains between 7.00 AM and 6:00 PM leave train east of crossing just east of freight station building.

Emergency water supply only at Lathrop on westward track.

6. Cars must not be left on straight leg of wye, Lathrop, to block tool house or crossover.

During cotton season, cars will be spotted on main track at Pierce Road crossing, one mile west of Plains, Chowchilla Branch.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mt-2, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Lathrop—Tracks leading to Lendlease.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Lathrop—Fresno No. 2 track; beet track; slop track.
“	Manteca—Spreckels Sugar spur.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Livingston—Spur to Shed 101.
Engines 2371, 2400, 2403 to 2407 inc., 2415, P-6, 7, 8, 10, 11, 12, 14, Mt, GS, F, SP, AM, MM, AC, and Mk over 210,000 pounds on drivers	Turlock — Track opposite peanut shed. Atwater—Industry track north of highway. Berenda—Corral track. Madera—Winery spur.

Load limit (car and contents):

Lathrop-Fresno	240,000 pounds
Chowchilla-MP 172.5	210,000 pounds
MP 172.5-Dairyland	169,000 pounds
Berenda-Daulton	210,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

LOCATIONS WHERE SPEED BOARD RESTRICTIONS APPLY TO ONE OR MORE CURVES, STRUCTURES, OR EXTENDED SECTION OF TRACK.

For Eastward Trains			For Westward Trains		
Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP	Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP
110.7	112.6	113.8	114.5	113.8	112.6
113.9	114.7	114.7	115.5	114.7	114.7
124.3	125.2	126.3	127.0	126.3	125.2
133.9	134.8	134.9	135.6	134.9	134.8
149.0	149.7	151.4	152.1	151.4	149.7
182.4	183.2	184.8	185.5	184.8	183.2
193.6	194.5	194.9	195.7	194.9	194.5
198.6	199.2	203.5	202.7	201.9	201.9
201.2	201.9	201.9			

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
	LATHROP - FRESNO	
134.8	Livingston	Merced River bridge......Overhead and side

Sugar beet dump at Spreckels Sugar Beet Factory Manteca uncovered and care should be exercised by trainmen while working thereon.

SPEED RESTRICTIONS: Maximum speed of trains with engines of various classes is shown below. Trains with engines not listed must not exceed 35 MPH. Speed must be further restricted as required by speed boards, and may be exceeded only as authorized by special instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE ABSOLUTE SAFETY, REGARDLESS OF TIME.

TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
	PASSENGER							*FREIGHT AND MIXED							
	DEP P-7-8-10-12 A Mt GS	DEF E P-1-3-4-5-6-11	T-26-32-37-40 AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB) SP B (if CCB)	AM B (if not CCB)	DES 1 to 7 DES 100 to 107 C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB) AC-1-2-3	C-15-17-32 Mk-10-11 MM	With no Restricted Cars (see note)	With Restricted Cars (see note)	DEP DEF E P A Mt GS	DES 1 to 7 DES 100 to 107 T-26-32-37-40 Mk-5-6-7-8-9 F (if CCB) AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB) SP B	DES-200 C-15-17-32 TW Mk-2-4-10-11 AC-1-2-3 AM MM	DES A DEP Mk DEF F E Mt T GS P SP C B TW	M AC AM MM
COLUMN:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Between Lathrop and Fresno, except	70	65	60	50	45	40	35	50	40	45	40	35	30	30	25
Through switches, East and West zones, Lathrop	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
MP 92.00-MP 94.00	30	30	30	30	30	30	30	20	20	20	20	20	20	20	20
On east leg of wye, Lathrop	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
MP 112.60-MP 113.60 (Modesto)	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
MP 113.60-MP 130.50, except	65	60	60	50	45	40	35	40	40	40	40	35	30	30	25
Over TSRy crossing, MP 114.70	40	40	40	40	40	40	35	25	25	25	25	25	25	25	25
MP 125.20-MP 126.30 (Turlock), except	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
*Entering intersections, Olive, Marshall and Main Sts., Turlock	30	30	30	30	30	30	30	30	30	30	30	30	30	30	25
MP 134.64-MP 134.88 (Merced River bridge), except	50	50	50	50	45	40	35	35	35	35	35	35	30	30	25
With GS, F, AC, or Mt-2 class engines#	25	......	25	25	......	25	......	25	25	25	25	25	25	25	25
MP 149.70-MP 151.60 (Merced)	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
MP 163.00-MP 181.50	65	60	60	50	45	40	35	40	40	40	40	35	30	30	25
Fresno River bridge Madera-east end siding Madera	45	45	45	45	45	40	35	30	30	30	30	30	30	30	25
Over San Joaquin River bridge 194.52#	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
MP 199.28-Fresno, except	40	40	40	40	40	40	35	30	30	30	30	30	30	20	20
Eastward over switch at MP 201.90 (end double track)	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20
*Fresno, along or across street crossings	20	20	20	20	20	20	20	20	20	12	12	12	12	12	12
Nos. 51 and 52, MP 199.28-MP 204.50, except	50	......	......	......	......	......	......	......	......	......	......	......	......	......	......
No. 52 over switch at MP 201.90 (end double track)	25	......	......	......	......	......	......	......	......	......	......	......	......	......	......

***Regulated by city ordinance.**

#GS, F, AC and Mt-2 class engines must not operate double-headed over these structures.

Nos. 51 and 52 handling streamlined equipment with P-7-8-10-12 or Mt class engine with electro-pneumatic brakes functioning on engine and all cars, may run not to exceed 75 MPH in territory where maximum speed of 70 MHP is authorized in Speed Restrictions table.

***Freight and mixed trains with an engine listed in columns 5, 6 or 7 must not exceed maximum speed permitted the same engine when handling passenger train.**

(Note) RESTRICTED CARS: Twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed permitted with Certain Equipment"; scale test cars; and cars with arch-bar trucks.

DES 1 to 7 and DES 100 to 107 may make maximum of 40 MPH in territory where 30 MPH is authorized in Column 14.

TERRITORY	PASSENGER	FREIGHT AND MIXED	LIGHT ENGINE RUNNING FORWARD	ENGINE BACKING WITH TRAIN OR LIGHT
Between Berenda and Daulton	20	20	15	15
Between Chowchilla and Dairyland, except	20	20	20	20
Ash-Dairyland	10	10	10	10

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:	15
With engine backing	10
Madera, on winery spur	20

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Newark and Santa Clara. . Trains on Elmhurst-Santa Clara line.
Niles. . . . . Trains on Elmhurst-San Jose line.

RULE 14 (e). As specified below, — — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Elmhurst-Newark-Santa Clara. . . Trains on Elmhurst-Santa Clara line.
Niles. . . . . Trains on Milpitas line.

RULE 14 (l). Whistle signal must be sounded and bell kept ringing when entering or leaving the Sugar Co.'s yard at Alvarado or approaching their road crossing.

RULE 14 (m). Whistle will not be sounded one mile before reaching stations between:
Oakland Pier and Elmhurst.

RULES 17 and 17 (C). Headlights of engines standing at end of wharf at Oakland Pier must be extinguished when steamers are entering slip. Headlights of eastward trains must be extinguished while standing at Oakland Pier and dimmed until Oakland Pier Tower has been passed.

RULE 21 (C). Passenger engines to handle trains from Oakland Pier may display indicators before leaving West Oakland.

Indicators of engines on trains arriving Oakland Pier may be displayed until engine reaches roundhouse at West Oakland, and must be removed immediately on arrival at delivery track.

RULE 82 (A). Trains receiving Western Division clearance at San Jose may leave Santa Clara without clearance.

RULE 83. Identification may be made by eastward trains between Redwood Jct. and end of double track to be applied at end of double track. Reduce speed sufficiently to permit identification and comply with Rule 14 (k).

RULE 83 (A). Only trains originating or terminating will register at West Oakland, Newark and Livermore.

Extra trains will register at Niles Tower and Niles.

Trains originating or terminating San Jose Yard will register at Santa Clara.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:

Elmhurst. . . . . Regular trains.
Niles . . . . All trains.
Niles Tower. . . . . All trains.
Redwood Jct. . . . . All trains.
Newark . . . . Nos. 407 and 406.
Santa Clara. . . . . . All trains at Santa Clara.

RULE 84. Proceed signal 12 (c) must be used to start trains from Oakland Pier.

RULE 93. When freight cars are moved from one point to another on main track within Oakland yard limits at night, a red light must be displayed on rear of rear car.

Yard limits in which the provisions of Rule 93 will apply, are established at the following points:

West MP			East MP
	Oakland	(Martinez line)	17.35
	"	(Niles line)	15.82
	"	(Alvarado line)	14.01
17.75	Hayward		21.69
80.70	Tracy	(Martinez-Los Banos line)	85.64
69.19	"	(Niles-Lathrop line)	74.37
24.44	Redwood Jct.	(San Mateo-Newark line)	28.22
	" "	(Palo Alto line)	27.17
35.20	Newark	(Centerville-Redwood Jct. line)	38.51
28.79	"	(Alvarado-Santa Clara line)	32.25
41.29	Niles	(Tracy-Redwood Jct. line)	30.67
27.37	"	(Hayward-Milpitas line)	30.95
41.70	Eliot		45.40
63.25	"	(San Ramon line)	
45.89	Livermore		48.66
54.03	Altamont		55.64
43.47	San Jose	(Palo Alto-Coyote line)	56.00
44.85	" "	(Milpitas line)	
43.74	" "	(Alviso line)	

Tracy. Eastward trains from Niles line must receive proceed signal from yardman before passing Signal 704.

RULE 95. Train orders issued under Form F reading to or from Santa Clara will apply over the Coast Division into or out of San Jose.

Nos. 401, 409 and 413 and sections of those schedules will be cleared at Redwood Jct. according to their identification arriving at that point, and are authorized to display this identification to Bayshore without train-order authority, clearance for sections to show "No signals" or "Green signals" following train number.

RULE D-97 (A). Will apply between Oakland Pier and Elmhurst.

RULE 103 (A). Oakland. When moving against current of traffic flagman must protect crossing before moving over 5th, 19th, 29th Aves., and High St.

Public Utilities Commission orders require that trains and engines must stop, and member of crew must protect traffic on the following street or highway crossings before movement is made:

Mulford. . . . . Crossing Maitland Drive on Airport drill.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Elmhurst. . . . . End of double track, for eastward track;
Alvarado line, for Niles line;
Stonehurst line, for house track extension.

Switches handled by operator for trains.
Whistle signals: For Alvarado line, o — —.
For Niles line, — o —.

Niles . . . . Niles Tower line, for Elmhurst-Livermore line.

Westward trains from Niles Tower line intending to use crossover west of station building must remain clear of crossover until both switches have been lined, then be governed by indication in Signal 287.

Tracy. . . . . Niles line, for Martinez line.

Tracy. . . . . End double track, for eastward track.

Tracy. . . . . Los Banos line, for Niles line.

RULE 105. Eliot. Siding No. 1 is first track north of main track. Siding No. 2 is second track north of main track and connects with Siding No. 1 at both ends.

These sidings may be used by trains in either direction, or as instructed by train dispatcher.

Livermore. Siding No. 1 extends from station building westward 4600 feet and to be used by eastward trains.

Siding No. 2 extends from switch 2000 feet east of station building 4000 feet and to be used by westward trains.

Connection between siding No. 1 and siding No. 2 must be left clear. Trains may move from one siding to the other only after authority has been given by train dispatcher.

Alvarado. Siding extends from crossover 250 feet west of station building to west end.

Hayward. Siding extends from crossover 1500 feet west of station building to west end.

Newark. Siding on Tracy-Redwood Jct. line is located west of Elmhurst-Santa Clara line crossing.

Siding on Elmhurst-Santa Clara line is located east of Tracy-Redwood Jct. line crossing, and extends from initial switch at east end to crossover only.

Passenger siding on Elmhurst-Santa Clara line is located west of station building; extends from crossover 300 feet west of station building to west end; has capacity of engine and 13 passenger cars; must be left clear of cars, and to be used by passenger trains when authorized by train order.

RULE 221. West Oakland is a train-order office only for trains originating.

Nos. 250 and 74, and eastward extra trains consisting of passenger equipment only to Coast Division, may leave Santa Clara without clearance.

Trains must obtain clearance before leaving Newark and Niles.

RULE D-251. Will apply as follows:
On both main tracks, between Oakland Pier and Elmhurst.

RULE 505. AUTOMATIC BLOCK SYSTEM

Elmhurst. Signals are numbered as automatic and are under control of train-order operator. When signals display stop indication, trains must stop, and not proceed until signal displays proceed indication, or proceed signal is given by operator with yellow flag by day or yellow light by night.

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

Eastward movements governed by dwarf light signals 710, 712, 714.

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

Westward freight trains stopped by Signal 717, located east of overhead crossing east of Tracy, use telephone located on this signal, call switch tender at puzzle switch and be governed by his instructions.

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

RULE 510. Following block signals equipped with a triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signals		Westward Signals
	Spring switch, Shinn	P-423
P-526	Rock slide detector fence, MP 53.5	P-543
P-386	Collision detector, bridges 39.26 and 39.44 (Alviso)	
	Collision detector, bridge 39.26 (Alviso)	P-393
	Collision detector, bridge 39.44 (Alviso)	P-413

RULE 516. Overlap posts:

Hayward (3600 feet east of Signal 187) . . . Westward trains.
Livermore (1275 feet east of Signal 473) . . Westward trains.
Livermore (850 feet west of Signal 470) . . Eastward trains.

RULE 535. SPRING SWITCHES

Spring switches not equipped with facing point locks are located as follows, and speed indicated in Speed Restrictions table must not be exceeded while passing over them in facing movement, or in trailing through them:

Location		Normal Position
Redwood Jct.	End double track	Westward track
Shinn	East end siding	Main track

Spring switches are also located on other tracks as follows:

West Oakland. Two on incoming engine leads, east of roundhouse; two on outgoing freight engine lead, near tin shop, and one on outgoing engine lead west of roundhouse.

Sather. Tail track to Hutchison drill.

Oakland Pier. West end of tracks 4, 5 and 6.

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

On double track within Oakland yard limits signal operator may arrange to move trains from one tower to another against the current of traffic, after having an understanding by telephone for each movement. Before moving trains against current of traffic signal operator must know that track to be used is clear of opposing engines and trains.

Oakland Pier. Limits extend eastward to automatic Signal 40 on eastward main track and to home signal 450 feet east of Signal 40 on westward main track on Martinez line, and to automatic Signal 42 on both main tracks on Niles line, and on yard tracks 9 and 10 to Signal 44; and on yard tracks 11, 12 and 13 to home signal 175 feet east of Maritime overpass.

When siren whistle is sounded, all movement must stop and await proper signal.

The last signal governing movement into any track except tracks 17, 18, 19 and 20 is a two-arm dwarf signal. When home signal displays proceed indication, and approach signal displays yellow aspect, it indicates that movement is to be made into a track occupied by engines or cars. Responsibility for collision will rest with train or engine entering.

Niles Tower. Limits extend from dwarf signal on Niles line and signal on Tracy line 1685 feet from WPRR crossing, to Signal 300 on Milpitas line and to Signal P-423 on Centerville line, and also includes Milpitas-Centerville leg of wye.

Junction switch at Niles Jct. is remotely controlled by signal operator at Niles Tower. When necessary to hand throw this switch permission must be obtained from signal operator and switch must be cranked over. Instructions for operation posted on crank box opposite switch.

Derail near east end of yard track No. 1 at Niles is electrically locked and under control of signal operator at Niles Tower. Instructions for operation by hand when authorized by signal operator are posted inside of lock box.

Whistle signals:
To San Jose, o — —
To Centerville, — o —.
To Niles, o — o.
To Tracy, — o — o.
Engines from trains to Niles for water, o — o —.

Newark. Limits extend from signal 50 feet east of wye switch on Centerville line to signal 1150 feet east of wye switch on Santa Clara line, and to signal 650 feet west of wye switch on Elmhurst line, and to dwarf signals on Redwood Jct. line near Newark station building.

Switches and derails at west end of extension of Santa Clara line siding and east end of house track are electrically locked and controlled by signal operator. Instructions for operation posted inside of lock box.

Whistle signals:
To Santa Clara, o — —.
To Santa Clara line siding, o — — o.
To Santa Clara line siding extension, — o.
To Redwood Jct., — o — o.
To Dumbarton line siding, — o — o o.
To Centerville, — o—.
To Elmhurst, o — o.

Newark Slough drawbridge, MP 34.53 on Redwood Jct. line. No signal operator regularly on duty. Signals and derails lined for train movement except when signal operator occasionally on duty. If signals display stop indication and derails properly lined, train may follow flagman through interlocking limits.

San Francisco Bay drawbridge, MP 32.53 on Redwood Jct. line. Derails in main track within interlocking limits east and west of draw span.

West Oakland (First and Cedar Sts.). Limits on Niles line extend from Signal Bridge 110 to Signal Bridge 112. Limits on eastward main track on Martinez line extend from signal 500 feet west of freight lead crossing to 1700 feet east of freight lead crossing. Limits on westward main track on Martinez line extend from 1600 feet east of freight lead crossing to 450 feet east of Signal 40. Limits on eastward and westward freight leads extend from westward signals 2000 feet east of Martinez line main track crossing to Signal Bridge 112 on Niles line, and to westward signals on passenger yard leads 40, 50 and 60.

Magnolia Tower (First and Chestnut Sts.). Limits extend on eastward main track from signal 1600 feet west of WPRR crossing to dwarf signal 500 feet east of WPRR crossing, and on westward main track from signal 500 feet east of WPRR crossing to dwarf signal 480 feet west of crossing.

Fruitvale. Limits on main track extend from Signal Bridge 123 to Signal Bridge 127 on westward track, and to westward dwarf signal 680 feet west of Signal Bridge 127 on eastward track.

Radum. Limits on main tracks extend from home signal at west wye switch to home signal at east wye switch on Niles-Tracy line, and to home signal at wye switch on Radum-San Ramon line.

Interlocking signals for Niles-Tracy line and for WPRR main track will normally display proceed indication for both directions.

If a train on Niles-Tracy line is stopped by interlocking signal when no signal operator on duty, train may flag through interlocking limits.

GENERAL REGULATIONS

RULE 824. Tracy. Before engine is detached when train stops on yard track in Hill yard not less than three hand brakes must be set on cut west of C St., and four hand brakes must be set on east end of train.

RULE 825. Train crews must not release hand brakes on outbound trains at Tracy until engine is coupled and brake pipe is charged.

AIR BRAKE RULES

RULE 2. Running test must be made immediately after engine is detached from trains arriving Oakland Pier.

RULE 17. Retainers must be used on freight and mixed trains as follows:

With 20 or more cars, and tonnage averaging over 150 Ms per operative brake, use 10 retainers on head end of train, or more if requested by engineer, Altamont to Midway.

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:

Altamont......Trains that stop.

Freight trains may pass Altamont without stopping for rear end test if proceed signals are given by trainmen after complying with Air Brake Rule 4. Speed must be reduced to 8 MPH. Helper engineers will reduce working steam sufficiently in advance so that lead engineer may control speed by gravity.

PASSENGER TRAINS

RULE 39. Running test must be made as follows:

Westward trains for Oakland Pier, immediately after passing Magnolia Tower.

Equipment being handled between West Oakland and Oakland Pier, as soon as practicable after starting.

Eastward and westward trains at Altamont.

MISCELLANEOUS

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Ravenswood—Spurs. Newark—Hillard, Leslie and Morton Salt spurs; Westvaco Chemical spur.
Mk-7-8-9, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Mulford — Automotive Fibers spur.
"	Alvarado—Sugar spurs.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Alviso — Cannery spur; Shell spur.
"	Agnew—Distillery spur.

Load limit (car and contents):

Redwood Jct.-Tracy	240,000 pounds
Oakland-San Jose via Niles	240,000 pounds
Elmhurst-Santa Clara	240,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

LOCATIONS WHERE SPEED BOARD RESTRICTIONS APPLY TO ONE OR MORE CURVES, STRUCTURES, OR EXTENDED SECTION OF TRACK.

For Eastward Trains			For Westward Trains		
Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP	Location of Speed Board MP	Beginning of Restriction MP	End of Restriction MP
OAKLAND-TRACY VIA NILES					
9.8	10.5	37.1	37.8	37.1	10.5
40.9	41.7	45.4	46.1	45.4	41.7
45.4	46.1	47.6	48.4	47.6	46.1
51.3	52.0	63.0	63.7	63.0	52.0
ELMHURST-SANTA CLARA					
12.6	13.4	13.4	14.1	13.4	13.4
13.5	14.2	14.7	14.4	13.7	13.4
28.0	28.7	32.3	15.4	14.7	14.2
35.3	36.0	36.8	33.0	32.3	28.7
38.4	39.0	40.1	37.5	36.8	36.0
			40.8	40.1	39.0
REDWOOD JCT.-NILES JCT.					
30.8	31.5	33.0	33.7	33.0	31.5
33.5	34.2	34.4	35.2	34.4	34.2
34.6	35.3	38.5	39.3	38.5	35.3

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description	
28.9	Henderson	Highway underpass	Side
32.5	Dumbarton	San Francisco Bay drawbridge	Side
34.5	Dumbarton	Newark Slough drawbridge	Side
42.9	Niles Jct.	Highway underpass	Side
30.8	Dresser	Alameda Creek bridge	Side
31.5	Farwell	Alameda Creek bridge	Overhead and side
38.3	Pleasanton	WPRR overhead bridge	Overhead
55.4	Altamont	Highway overhead bridge	Overhead and side
57.9	Altamont	Tunnel	Side
18.2	Lorenzo	San Lorenzo Creek bridge	Overhead and side
24.2	Halvern	WPRR overhead bridge	Overhead
29.4	Niles	Highway underpass	Side
3.5	Oakland Pier	Posts supporting trainshed	Side
36.2	Drawbridge	Warm Springs Slough bridge	Side
36.8	Drawbridge	Coyote Creek bridge	Side
29.4	Niles Tower	Street underpass	Side

SPEED RESTRICTIONS: Maximum speed of trains with engines of various classes is shown below. Trains with engines not listed must not exceed 35 MPH. Speed must be further restricted as required by speed boards, and may be exceeded only as authorized by special instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE ABSOLUTE SAFETY, REGARDLESS OF TIME.

TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT	
	PASSENGER							*FREIGHT AND MIXED							
	DEP P-7-8-10-12 A Mt GS	DEF E P-1-3-4-5-6-11	T-26-32-37-40 AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB) SP B (if CCB)	AM B (if not CCB)	DES 1 to 7 DES 100 to 107 C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB) AC-1-2-3	C-15-17-32 Mk-10-11 MM	With no Restricted Cars (see note)	With Restricted Cars (see note)	DEP DEF E P A Mt GS	DES 1 to 7 DES 100 to 107 T-26-32-37-40 Mk-5-6-7-8-9 F (if CCB) AC-4-5-6-7-8-9-10-11-12	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB) SP B	DES-200 C-15-17-32 TW Mk-2-4-10-11 AC-1-2-3 AM MM	DES DEP DEF E T P C TW A Mk F Mt GS SP B	M AC AM MM
COLUMN:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Between Redwood Jct. and Tracy, except	50	50	50	50	45	40	35	40	40	40	40	35	30	20	20
Over spring switch, end double track, Redwood Jct.	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20
MP 31.51-MP 33.00 (San Francisco Bay bridge)	30	30	30	30	30	30	30	30	30	30	30	30	30	20	20
MP 34.53, over Newark Slough drawbridge and approaches	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
MP 35.20-MP 38.51 (Newark)	40	40	40	40	40	40	35	25	25	25	25	25	25	20	20
Through junction switches, Shinn to Niles Jct.	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Niles Jct.-MP 37.10	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20
MP 37.10-MP 46.10, except	35	35	35	35	35	35	35	35	35	35	35	35	30	20	20
MP 41.70-MP 45.40 (Eliot yard limits)	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
*MP 46.10-MP 47.60 (Livermore city limits)	25	25	25	25	25	25	25	20	20	20	20	20	20	20	20
MP 47.60-MP 52.00	35	35	35	35	35	35	35	35	35	35	35	35	30	20	20
MP 52.00-MP 63.00	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20
MP 63.00-C St. crossing, Tracy	35	35	35	35	35	35	35	35	35	35	35	35	30	20	20
C St. crossing-end double track	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Between Niles and San Jose Yard, except	40	40	40	40	40	40	35	25	25	25	25	25	25	20	20
With GS, F, AC, Mt class engines	15	......	15	15	......	15	......	15	15	15	15	15	15	15	15
Passing Niles Tower	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
MP 44.85-San Jose Yard (San Jose yard limits)	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Between Oakland Pier and Santa Clara, except	60	60	60	50	45	40	35	40	40	40	40	35	30	30	25
Oakland Pier-MP 10.50, except	30	30	30	30	30	30	30	30	30	30	30	30	30	30	25
On curve west of and across freight leads to West Oakland	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Across main track on both leads to West Oakland	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Over Adeline St. crossing, Oakland	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
*Between Market St. and Oak St., Oakland	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
MP 10.50-Elmhurst	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Over junction switch, Elmhurst	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
On curve at MP 13.50	35	35	35	35	35	35	35	25	25	25	25	25	25	25	25
On curve at MP 14.50	55	55	55	50	45	40	35	35	35	35	35	35	30	30	25
Elmhurst-MP 32.30 with GS or Mt class engines	45	......	......	......	......	......	......	40	40	40	......	......	......	30	......
MP 28.79-MP 32.30 (Newark)	40	40	40	40	40	40	35	25	25	25	25	25	25	15	15
MP 36.00-east end bridge 36.83	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
MP 39.00-MP 40.10 (on curves)	40	40	40	40	40	40	35	35	35	35	35	35	30	30	25
MP 43.70-Santa Clara	50	50	50	50	45	40	35	35	35	35	35	35	30	20	20
*Over Stockton Ave. and Emery St., San Jose, 10 PM—6 AM	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Between Elmhurst and Niles Jct., except	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Over Davis St., San Leandro	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

***Regulated by city ordinance.**

Trains must not exceed 20 MPH when passing other trains being serviced between Cedar and Kirkham Sts., Oakland.

GS, F, AC, Mt-2 class engines must not operate double-headed over Alameda Creek bridge 31.56, west of Farwell nor over San Lorenzo Creek bridge 18.16 east of Lorenzo.

***Freight and mixed trains with an engine listed in columns 5, 6 or 7 must not exceed maximum speed permitted the same engine when handling passenger train.**

(Note) RESTRICTED CARS: Twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed permitted with Certain Equipment"; scale test cars; and cars with arch-bar trucks.

DES 1 to 7 and DES 100 to 107 may make maximum of 40 MPH in territory where 30 MPH is authorized in Column 14.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:	15
Ravenswood, on spur	8
Through any siding, crossover, turnout or slip-switch with engine backing	10

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Oakland and Santa Clara	Oakland and San Jose Yard via Niles	Niles and Redwood Jct.	Tracy to Niles	Niles to Tracy
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022	3200	1950	3200	800	850
DES-100 to 107	1300 to 1395	4500	3100	4500	1250	1350
E-23	1500 and 1502	3350	2600	4000	1000	1050
M-4	1617 to 1713	4450	3450	5250	1400	1500
M-6, 8	1721 to 1803, 1823 to 1825	5250	4100	6150	1650	1750
M-9, 11	1804 to 1822, 1826 to 1831 and 1836	5500	4300	6500	1750	1850
M-11	1832 to 1835	5700	4450	6800	1800	1900
T-1	2242 to 2271	3800	2950	4500	1150	1250
T-8, 9	2161, 2174 and 2178	2750	2100	3250	830	880
T-23	2301 to 2310	5500	4300	6450	1750	1850
T-26	2283 to 2299	4800	3750	5550	1500	1600
T-28, 31	2311 to 2362	6000	4700	7100	1900	2000
T-32, 40	2363 to 2384	6150	4800	7100	1950	2050
T-36	2103	4050	3150	4800	1300	1350
T-37	2105 and 2106	5450	4250	6500	1700	1800
T-57, 58	2385 and 2386	4950	3850	5850	1550	1650
P-1, 3, 5	2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	4950	3850	5700	1500	1600
P-1	2400, 2403 to 2407 and 2415	4950	4150	5700	1500	1600
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450	4550	6250	1650	1750
P-6	2453, 2454 and 2458	6100	4750	7050	1900	2000
P-7	2476 and 2477	6500	5050	7750	2050	2150
P-8, 10	2461 to 2474, 2478 to 2483	6800	5300	7950	2050	2200
P-8, 10	2475, 2484 to 2491	6800	5700	7950	2050	2200
P-11	3100 to 3109	5250	4100	6150	1650	1750
P-12	3120 to 3129	6900	5350	8100	2100	2200
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	6600	5150	7850	2100	2200
C-15, 32	2500, 2505 to 2507	4250	3300	5050	1350	1400
C-17	2510 and 2511	5200	4050	6200	1700	1800
C-18	3400 to 3409	6050	4750	7200	1950	2050
C-19	3410 to 3426	6300	4950	7500	2000	2150
TW-1	2900 to 2913	5050	3950	6000	1600	1700
TW-2, 3	2932 to 2952	4050	3150	4800	1250	1350
TW-4, 6	2926 to 2931 and 2957	3850	3000	4600	1200	1250
TW-8	2914 to 2923	5550	4350	6600	1750	1850
A-3	3029	3900	3050	4400	1150	1200
A-3	3025, 3036, 3052 and 3057	3900	3300	4400	1150	1200
A-6	3000 to 3003	4800	4050	5400	1450	1550
Mk-2, 4	3201 to 3240	7650	5950	9100	2400	2550
Mk-5, 6	3241 to 3277	8450	6600	9950	2700	2850
Mk-7, 8, 9	3300 to 3324	9200	7200	10900	2950	3150
Mk-10	3295	7100	5550	8450	2300	2400
Mk-11	3297 and 3298	6800	5300	8050	2200	2300
F-1	3600 to 3652	9600	7500	11400	3050	3250
F-3	3653 to 3667	11000	8600	13100	3550	3750
F-4, 5	3668 to 3769	11000	9150	13100	3550	3750
AM-2	3900 to 3911	10900	8500	12900	3500	3700
MM-3	3930 and 3931	12800	10000	15200	3950	4300
AC-1, 2, 3	4000 to 4048	13300	10400	15800	4300	4550
AC-4, 5	4100 to 4125	17300	13500	18500	5600	5950
AC-6 to 12	3800 to 3811, 4126 to 4294	18300	14300	18500	5900	6200
Mt-1, 3, 4, 5	4300 to 4376	9000	7450	10550	2800	3000
Mt-2	4385 to 4390	9750	7600	11500	3050	3250
GS-1, 2	4400 to 4415	9600	7800	11250	3000	3150
GS-3, 4, 5, 6	4416 to 4469	10200	8000	12000	3100	3300
SP-1, 2, 3	5000 to 5048	12950	10150	15350	4150	4400
Allowance for Empty and Underloaded Cars	Less than 45 Ms	6	6	6	3	3
	45 Ms to 55 Ms	3	3	3	3	3
	More than 55 Ms	0	0	0	0	0

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOS TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

DIVISION MILEAGE

MAIN LINES

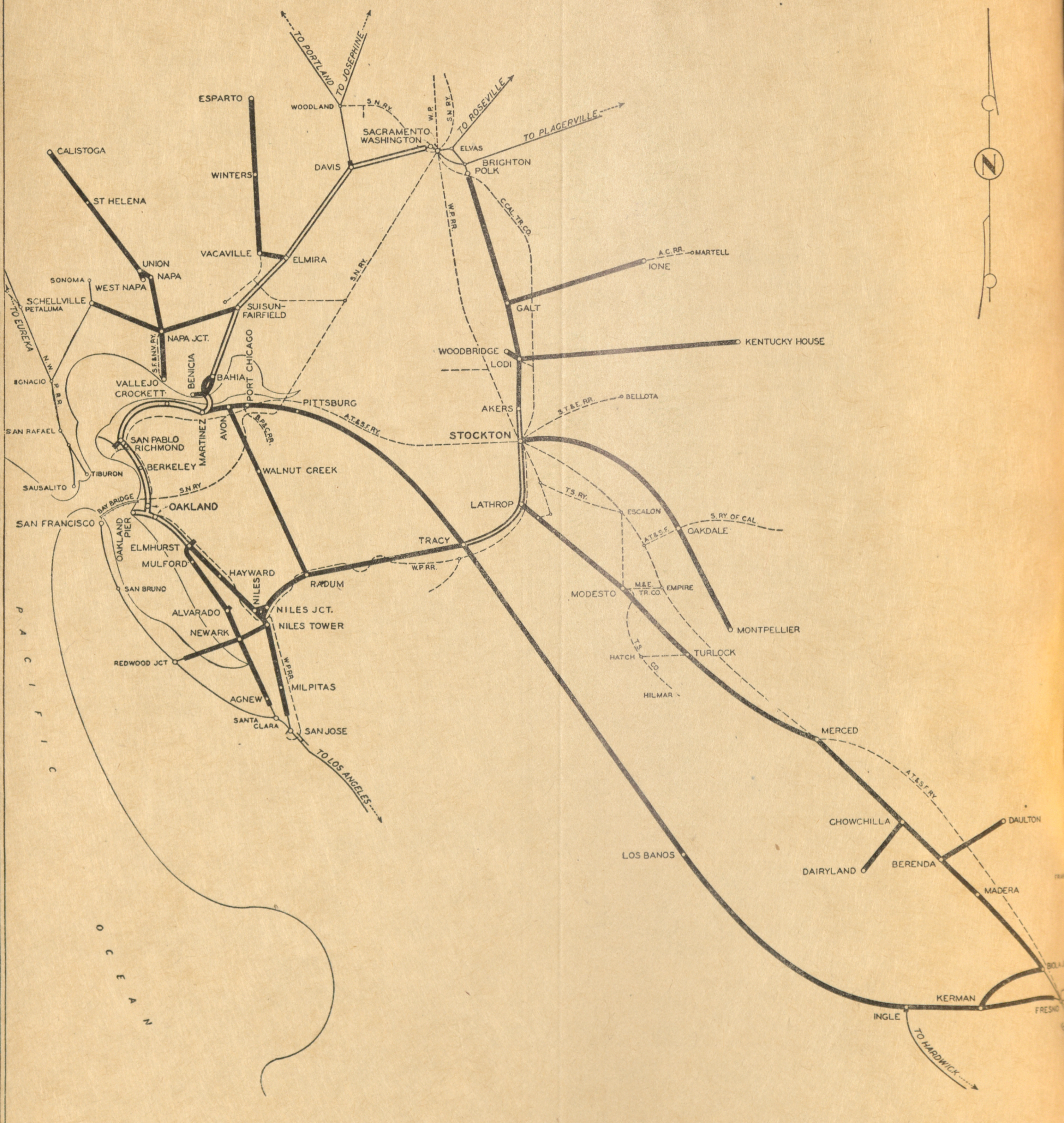
First Main Track:				
Oakland Pier to Washington	C. P. Ry.	1.01		
	S. P. R. R.	86.20	87.21	
Davis to end of division	S. P. R. R.		1.45	
Martinez to Tracy	S. P. R. R.		47.62	
Oakland Pier to Tracy via Niles	C. P. Ry.		66.97	
Tracy to Polk	C. P. Ry.		60.74	
Tracy to Fresno via Kerman	S. P. R. R.		124.18	
Lathrop to Biola Jct.	C. P. Ry.		106.45	
Elmhurst to Santa Clara	S. P. Co.		30.26	
Redwood Jct. to Niles Tower	C. P. Ry.		15.51	
Niles to San Jose	C. P. Ry.		15.41	
Kerman to Biola Jct.	S. P. R. R.		14.52	
Total First Main Track			570.32	
Second Main Track:				
Oakland Pier to Washington	C. P. Ry.	1.01		
	S. P. R. R.	86.33	87.34	
Martinez to Mococo	S. P. R. R.		.96	
Oakland Pier to Elmhurst	C. P. Ry.		9.17	
Tracy to Akers	C. P. Ry.		23.85	
Total Second Main Track			121.32	
Total Main Lines				691.64

BRANCH LINES

Richmond spur	San Pablo to Richmond Transfer	S. P. R. R.		2.06	
Napa	Suisun-Fairfield to Calistoga	S. P. R. R.		47.34	
Vallejo	Napa Jct. to Vallejo	S. P. R. R.		7.13	
Schellville	Napa Jct. to Schellville	S. P. R. R.		11.30	
Union	Union to West Napa	S. P. R. R.		2.01	
Winters	Elmira to Esparto	S. P. R. R.		30.74	
San Ramon	Avon to Radum	S. P. R. R.		29.85	
Oakdale	Stockton to Montpellier	S. P. R. R.		49.33	
Lodi	Lodi to Woodbridge	S. P. R. R.	2.59		
	Lodi to Kentucky House	S. P. R. R.	26.67		
		S. P. Co.	12.65	41.91	
Ione	Galt to Ione	S. P. R. R.		26.91	
Riverdale	Ingle to end of division	S. P. R. R.		.25	
Chowchilla	Chowchilla to Dairyland	S. P. Co.		10.23	
Berenda	Berenda to Daulton	S. P. R. R.		11.90	
Madera spur	Madera to end of spur	S. P. R. R.		3.93	
Elmhurst	Elmhurst to Stonehurst	S. P. R. R.		.75	
Total Branches					275.64
Total Western Division					967.28

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36″	100
37″	97.3
38″	94.7
39″	92.3
40″	90
41″	87.8
42″	85.7
43″	83.7
44″	81.8
45″	80
46″	78.3
47″	76.6
48″	75
49″	73.5
50″	72
51″	70.6
52″	69.2
53″	67.9
54″	66.7
55″	65.5
56″	64.3
57″	63.2
58″	62.1
59″	61
1′00″	60
1′01″	59
1′02″	58.1
1′03″	57.1
1′04″	56.2
1′05″	55.4
1′06″	54.5
1′07″	53.7
1′08″	52.9
1′09″	52.2
1′10″	51.4
1′11″	50.7
1′12″	50
1′13″	49.3
1′14″	48.6
1′15″	48
1′16″	47.4
1′17″	46.8
1′18″	46.2
1′19″	45.6
1′20″	45
1′25″	42.4
1′30″	40
1′35″	37.9
1′40″	36
1′45″	34.3
1′50″	32.7
1′55″	31.3
2′00″	30
2′15″	26.7
2′30″	24
2′45″	21.8
3′00″	20
3′30″	17.1
4′00″	15
5′00″	12
6′00″	10
7′00″	8.6
7′30″	8
8′00″	7.5
10′00″	6


TO PORTLAND
TO JOSEPHINE
ESPARTO
WOODLAND
S.N. RY.
W.P.
S.N. RY.
TO ROSEVILLE
TO PLACERVILLE
SACRAMENTO
WASHINGTON
ELVAS
BRIGHTON
POLK
CALISTOGA
WINTERS
DAVIS
ST HELENA
W.P. RR.
C. CAL. TR. CO.
VACAVILLE
ELMIRA
S.N. RY.
A.C. RR.
MARTELL
IONE
UNION
NAPA
SONOMA
WEST NAPA
SCHELLVILLE
PETALUMA
TO EUREKA
SUISUN-FAIRFIELD
GALT
NAPA JCT.
S.F. & N.V. RY.
KENTUCKY HOUSE
WOODBRIDGE
LODI
N.W. P. R.R.
IGNACIO
BENICIA
PORT CHICAGO
BAHIA
VALLEJO
CROCKETT
PITTSBURG
AKERS
ST. & E. RR.
BELLOTA
A.T. & S.F. RY.
SAN RAFAEL
MARTINEZ
AVON
B.P. & C. RR.
STOCKTON
SAN PABLO
RICHMOND
BERKELEY
TIBURON
SAUSALITO
WALNUT CREEK
S.N. RY.
BAY BRIDGE
OAKLAND
LATHROP
T.S. RY.
ESCALON
S. RY. OF CAL.
SAN FRANCISCO
OAKLAND PIER
A.T. & S.F.
OAKDALE
TRACY
ELMHURST
MULFORD
HAYWARD
W.P. RR.
RADUM
NILES
SAN BRUNO
MODESTO
M. & E. TR. CO.
EMPIRE
ALVARADO
NILES JCT.
NILES TOWER
NEWARK
MONTPELLIER
REDWOOD JCT.
W.P. RR.
HATCH
T.S. CO.
TURLOCK
MILPITAS
HILMAR
AGNEW
SANTA CLARA
SAN JOSE
MERCED
TO LOS ANGELES
P A C I F I C
A.T. & S.F. RY.
CHOWCHILLA
DAULTON
LOS BANOS
BERENDA
DAIRYLAND
MADERA
BIOLA JCT.
O C E A N
KERMAN
FRESNO
INGLE
TO HARDWICK
N

WESTERN DIVISION